Pakistan

Pakistan Demographic and Health Survey 1990/1991

National Institute of Population Studies

Demographic and Health Surveys
IRD/Macro International Inc.

Pakistan Demographic and Health Survey 1990/1991

National Institute of Population Studies
Islamabad, Pakistan

IRD/Macro International Inc.
Columbia, Maryland USA

July 1992

This report summarises the findings of the 1990-91 Pakistan Demographic and Health Survey (PDHS) conducted by the National Institute of Population Studies, in collaboration with the Federal Bureau of Statistics. IRD/Macro International Inc. provided technical assistance. Funding was provided by the U.S. Agency for International Development and the Government of Pakistan.

The PDHS is part of the worldwide Demographic and Health Surveys (DHS) programme, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information on the Pakistan survey may be obtained from the National Institute of Population Studies, No. 8, Street 70, F-8/3, Islamabad, Pakistan (Telephone 850205; Fax 851977; Telex 54139 NIPS PK). Additional information about the DHS programme may be obtained by writing to: DHS, IRD/Macro International Inc., 8850 Stanford Boulevard, Suite 4000, Columbia, MD 21045, USA (Telephone 410-290-2800; Fax 410-290-2999; Telex 198116).

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PREFACE

One of the major objectives of the National Institute of Population Studies (NIPS) is to assist the Ministry of Population Welfare by assessing and evaluating the Population Welfare Programme. The Pakistan Demographic and Health Survey (PDHS) has been one of the major activities in this context.

This survey is a part of the worldwide exercise to assess the changing demographic and health situation through 60 surveys in different countries. This effort is being coordinated by the Demographic and Health Surveys programme of IRD/Macro International Inc., Columbia, Maryland. Planning for the PDHS began in June 1990 and the survey was executed between December 1990 and May 1991. While the data processing was done simultaneously with the fieldwork, the tabulation was done during June and July 1991 and the preliminary report was released in August 1991. This survey, which is a follow-up of the Pakistan Contraceptive Prevalence Survey undertaken during 1984-85, was given high priority in the work plan of the Institute.

The survey provides us with an up-to-date set of relevant data useful to evaluate population, health and family planning programmes and to assess the overall demographic situation in the country. The results produced in this report provide social scientists, policy makers, and planners with a clear picture about the current level of demographic and health indicators and trends in the recent past and illuminate the likely direction for the future. The importance of the PDHS lies in the fact that it provides basic resource material for the Eighth Five-Year Plan presently being formulated.

For undertaking this arduous task, the Institute cooperated with IRD/Macro International Inc., which provided technical assistance and data processing equipment. The Federal Bureau of Statistics provided assistance in the selection of the sample and the fieldwork. The United States Agency for International Development (USAID) and the Government of Pakistan provided financial assistance and staff for the execution of this activity. To all these agencies, NIPS is highly indebted.

Since this project is a research exercise, there could be differences in the findings of this survey and other data available from different sources. This is an understandable situation; questions have especially been raised about the data on immunisations, the contraceptive method mix and fertility estimates. The users of these data may use caution while interpreting these differences and may draw their own conclusions.

Those who actually worked on the project from its inception to its completion deserve special appreciation. I am also thankful to Mr. K. U. Faruqui and Mr. K. M. Chima for their interest, support and guidance during their stay at NIPS as Project Director. We also acknowledge the services of Dr. A. Ghayur who worked as Principal Investigator for the initial part of the project.

Islamabad
1992

M. S. Jillani, Ph.D.
Executive Director

ACKNOWLEDGMENTS

The Pakistan Demographic and Health Survey (PDHS) was completed as a part of an international exercise undertaken in collaboration with IRD/Macro International Inc. (IRD), Columbia, Maryland. The PDHS was conducted in order to update information on human reproduction, infant and child mortality, contraceptive use, maternal and child care, and the nutritional status of children. The major objective of the PDHS was to provide a data base for evaluating programme efforts and developing strategies and plans for the future programme.

As in the case of all previous demographic surveys, the successful completion depended on a joint effort of a number of organizations and individuals. The National Institute of Population Studies undertook the responsibility of implementing the project only when IRD provided assistance in terms of technical knowhow and equipment, USAID/Islamabad fully financed it, and the Federal Bureau of Statistics (FBS) provided the sampling frame, field supervisory personnel and almost all logistical support for the fieldwork.

Conducting the fieldwork was a huge task and all activities were accomplished on time only with the dedicated, relentless and devoted efforts of the PDHS staff at the headquarters, data entry staff, the office editors, able FBS supervisors and drivers and all our field teams. Many thanks to each one of them for undertaking an enormous amount of hardship during the winter and maintaining the speed and efficiency of work during the month of Ramadan and during unexpected rains from February to April 1991.

We are deeply indebted to Dr. M. S. Jillani, former Secretary of the Ministry of Population Welfare, for the guidance and personal interest needed to maintain the speed of the project. The timely release of funds by him was definitely a big boost for all. Later, his support as a Project Director worked as a catalyst for finalizing and releasing the preliminary and final report of the PDHS.

The PDHS was undertaken in several stages: establishment of the office, questionnaire design and modification, sample design, pretesting of the questionnaire, training of field teams, fieldwork, questionnaire editing, and data entry. As an integral part of the survey activities, every activity was appraised and guided by the Technical Advisory Committee. This is to acknowledge the efforts and timely advice of the members of the Committee in the successful completion of the survey. Many thanks are due to the late Mr. S. M. Ishaque, former Director General, FBS for his professional association and help to the PDHS. We also acknowledge with deep gratitude all the moral and logistic support that we received from the offices of all provincial Director Generals, Population Welfare Departments and a large number of District Population Welfare Officers in conducting our field survey in very remote areas of Pakistan.

Special thanks are also due to the reviewers of various chapters which include Ms. Anne R. Cross, Dr. Elisabeth Sommerfelt, Dr. Kate Stewart and Dr. Fred Arnold. We would also like to thank the following IRD personnel for their assistance in producing tabulations, designing the survey and the sample, and editing and typing the report: Mr. Noureddine Abderrahim, Dr. Alfredo Aliaga, Dr. Ties Boerma, Mr. Trevor Croft, Ms. Jeanne Cushing, Ms. Thanh Le, Dr. A.M. Marckwardt, Ms. Kaye Mitchell, Dr. Sidney Moore, Mr. Luis Ochoa, Mr. Guillermo Rojas, Dr. Jeremiah Sullivan, and Ms. Jane Weymouth. The amount of work put in by Dr. S. S. Hashmi and Dr. A. Razzaque Rukanuddin to review and finalize this report needs to be fully

acknowledged and appreciated. Finally, we would like to acknowledge with deep gratitude and thanks the relentless and committed efforts of Dr. Fred Arnold who provided immense moral support and technical assistance at each stage of the project.

Tauseef Ahmed, Ph.D.
Principal Investigator

SUMMARY OF FINDINGS

The Pakistan Demographic and Health Survey (PDHS) was fielded on a national basis between the months of December 1990 and May 1991. The survey was carried out by the National Institute of Population Studies with the objective of assisting the Ministry of Population Welfare to evaluate the Population Welfare Programme and matemal and child health services. The PDHS is the latest in a series of surveys, making it possible to evaluate changes in the demographic status of the population and in health conditions nationwide. Earlier surveys include the Pakistan Contraceptive Prevalence Survey of 1984-85 and the Pakistan Fertility Survey of 1975.

Until recently, fertility rates had remained high with little evidence of any sustained fertility decline. In recent years, however, fertility has begun to decline due to a rapid increase in the age at marriage and to a modest rise in the prevalence of contraceptive use. The total fertility rate is estlmated to have fallen from a level of approximately 6.4 children in the early 1980s to 6.0 children in the mid-1980s, to 5.4 children in the late 1980s. The exact magnitude of the change is in dispute and will be the subject of further research. Important differentials of fertility include the degree of urbanisation and the level of women's education. The total fertility rate is estimated to be nearly one child lower in major cities (4.7) than in rural areas (5.6). Women with at least some secondary schooling have a rate of 3.6, compared to a rate of 5.7 children for women with no formal education.

There is a wide disparity between women's knowledge and use of contraceptives in Pakistan. While 78 percent of currently married women report knowing at least one method of contraception, only 21 percent have ever used a method, and only 12 percent are currently doing so. Three-fourths of current users are using a modern method and one-fourth a traditional method. The two most commonly used methods are female sterilisation (4 percent) and the condom (3 percent). Despite the relatively low level of contraceptive use, the gain over time has been significant. Among married non-pregnant women, contraceptive use has almost tripled in 15 years, from 5 percent in 1975 to 14 percent in 1990-91. The contraceptive prevalence among women with secondary education is 38 percent, and among women with no schooling it is only 8 percent. Nearly one-third of women in major cities are current users of contraception, but contraceptive use is still rare in rural areas (6 percent).

The Government of Pakistan plays a major role in providing family planning services. Eighty-five percent of sterilised women and 81 percent of IUD users obtained services from the public sector. Condoms, however, were supplied primarily through the social marketing programme.

The use of contraceptives depends on many factors, including the degree of acceptability of the concept of family planning. Among currently married women who know of a contraceptive method, 62 percent approve of family planning. There appears to be a considerable amount of consensus between husbands and wives about family planning use: one-third of female respondents reported that both they and their husbands approve of family planning, while slightly more than one-fifth said they both disapprove. The latter couples constitute a group for which family planning acceptance will require concerted motivational efforts.

The educational levels attained by Pakistani women remain low: 79 percent of women have had no formal education, 14 percent have studied at the primary or middle school level, and only 7 percent have attended at least some secondary schooling. The traditional social structure of Pakistan supports a natural fertility pattern in which the majority of women do not use any means of fertility regulation. In such populations, the proximate determinants of fertility (other than contraception) are crucial in determining

fertility levels. These include age at marriage, breastfeeding, and the duration of postpartum amenorrhoea and abstinence.

The mean age at marriage has risen sharply over the past few decades, from under 17 years in the 1950s to 21.7 years in 1991. Despite this rise, marriage remains virtually universal: among women over the age of 35, only 2 percent have never married. Marriage patterns in Pakistan are characterised by an unusually high degree of consanguinity. Half of all women are married to their first cousin and an additional 11 percent are married to their second cousin.

Breastfeeding is important because of the natural immune protection it provides to babies, and the protection against pregnancy it gives to mothers. Women in Pakistan breastfeed their children for an average of 20 months. The mean duration of postpartum amenorrhoea is slightly more than 9 months. After the birth of a child, women abstain from sexual relations for an average of 5 months. As a result, the mean duration of postpartum insusceptibility (the period immediately following a birth during which the mother is protected from the risk of pregnancy) is 11 months, and the median is 8 months. Because of differentials in the duration of breastfeeding and abstinence, the median duration of insusceptibility varies widely: from 4 months for women with at least some secondary education to 9 months for women with no schooling; and from 5 months for women residing in major cities to 9 months for women in rural areas.

In the PDHS, women were asked about their desire for additional sons and daughters. Overall, 40 percent of currently married women do not want to have any more children. This figure increases rapidly depending on the number of children a woman has: from 17 percent for women with two living children, to 52 percent for women with four children, to 71 percent for women with six children. The desire to stop childbearing varies widely across cultural groupings. For example, among women with four living children, the percentage who want no more varies from 47 percent for women with no education to 84 percent for those with at least some secondary education.

Gender preference continues to be widespread in Pakistan. Among currently married non-pregnant women who want another child, 49 percent would prefer to have a boy and only 5 percent would prefer a girl, while 46 percent say it would make no difference.

The need for family planning services, as measured in the PDHS, takes into account women's statements concerning recent and future intended childbearing and their use of contraceptives. It is estimated that 25 percent of currently married women have a need for family planning to stop childbearing and an additional 12 percent are in need of family planning for spacing children. Thus, the total need for family planning equals 37 percent, while only 12 percent of women are currently using contraception. The result is an unmet need for family planning services consisting of 25 percent of currently married women. This gap presents both an opportunity and a challenge to the Population Welfare Programme.

Nearly one-tenth of children in Pakistan die before reaching their first birthday. The infant mortality rate during the six years preceding the survey is estimated to be 91 per thousand live births; the under-five mortality rate is 117 per thousand. The under-five mortality rates vary from 92 per thousand for major cities to 132 for rural areas; and from 50 per thousand for women with at least some secondary education to 128 for those with no education.

The level of infant mortality is influenced by biological factors such as mother's age at birth, birth order and, most importantly, the length of the preceding birth interval. Children born less than two years after their next oldest sibling are subject to an infant mortality rate of 133 per thousand, compared to 65 for those spaced two to three years apart, and 30 for those born at least four years after their older brother or sister.

One of the priorities of the Government of Pakistan is to provide medical care during pregnancy and at the time of delivery, both of which are essential for infant and child survival and safe motherhood. Looking at children born in the five years preceding the survey, antenatal care was received during pregnancy for only 30 percent of these births. In rural areas, only 17 percent of births benefited from antenatal care, compared to 71 percent in major cities. Educational differentials in antenatal care are also striking: 22 percent of births of mothers with no education received antenatal care, compared to 85 percent of births of mothers with at least some secondary education.

Tetanus, a major cause of neonatal death in Pakistan, can be prevented by immunisation of the mother during pregnancy. For 30 percent of all births in the five years prior to the survey, the mother received a tetanus toxoid vaccination. The differentials are about the same as those for antenatal care generally.

Eighty-five percent of the births occurring during the five years preceding the survey were delivered at home. Sixty-nine percent of all births were attended by traditional or trained birth attendants, while 19 percent were assisted by a doctor or nurse.

The Expanded Programme on Immunisation in Pakistan has met with considerable success. Among children 12 to 23 months of age, 70 percent had received a BCG vaccination, 50 percent a measles vaccination, and 43 percent had received all three doses of DPT and polio vaccine. Only 35 percent, however, had received all of the recommended vaccinations, while 28 percent had received none at all. Thirty-nine percent of boys were fully protected, compared to 31 percent of girls.

Sixteen percent of children under the age of five had been ill with a cough accompanied by rapid breathing during the two weeks preceding the survey. Children 6-11 months old were most prone to acute respiratory infections (23 percent). Two-thirds (66 percent) of children who were sick were taken to a health facility or provider. All but 15 percent of the sick children received some kind of treatment.

About the same proportion of children (15 percent) had suffered from diarrhoea in the two weeks preceding the survey, with the highest incidence among children under two years of age. Nearly half (48 percent) were taken to a health facility or provider. About two of five (39 percent) children with diarrhoea were treated with oral rehydration solution prepared from ORS packets. Knowledge of oral rehydration therapy is widespread: 90 percent of mothers recognise ORS packets. Nearly two-thirds (63 percent) of mothers have used ORS packets at some time, and among these, three-quarters had mixed the solution correctly the last time they prepared it.

Thirty percent of children had suffered from fever in the two weeks preceding the survey. Those most prone to illness were age 6 to 11 months. Two-thirds of children with fever were taken to a health facility or provider.

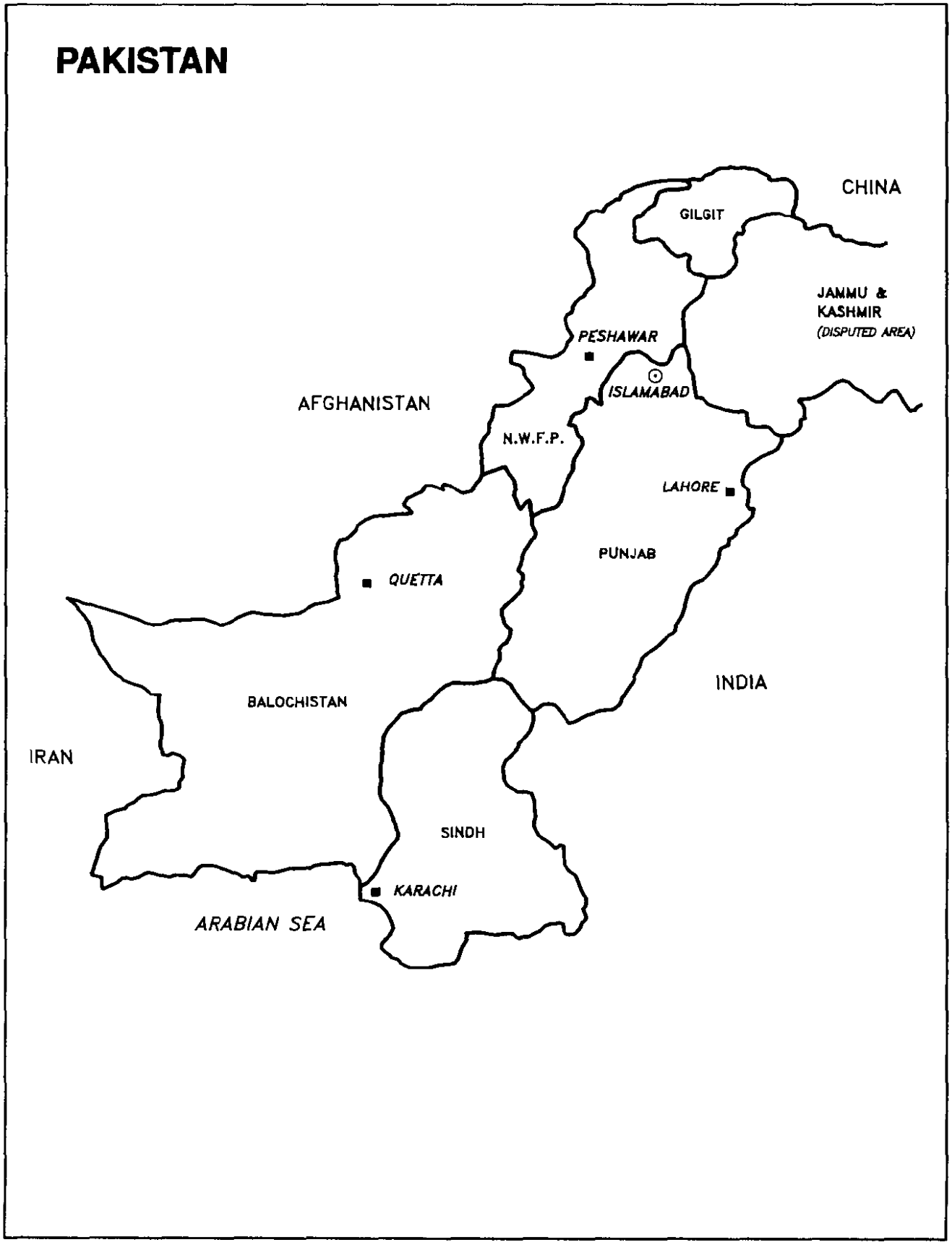
Inadequate nutrition continues to be a serious problem in Pakistan. Fifty percent of children under five years of age suffer from stunting (an indicator of chronic undernutrition), as measured by height for age. The prevalence of stunting increases with age, from 16 percent for children under 6 months to 63 percent of four-year olds. The lowest prevalence is found in Punjab (44 percent), and the highest in Balochistan (71 percent). The mother's level of education is an important factor; the prevalence of stunting varies from 18 percent for mothers with some secondary education to 56 percent for mothers with no education.

Acute undernutrition, low weight for height, is less of a problem in Pakistan than chronic undernutrition. Nine percent of children suffer from acute undernutrition (wasting). The prevalence of wasting does not vary substantially between geographic groupings. The largest differential is for mother's

education: 4 percent of children of mothers with some secondary school or higher education are wasted, compared to 10 percent of children of mothers with no schooling.

A systematic subsample of households in the women's survey was selected to obtain information from the husbands of currently married women. The focus was on obtaining information about attitudes, behaviour, and the role of husbands regarding family planning. Husbands' responses concerning knowledge and use of contraception were remarkably similar to women's responses: about four-fifths knew of at least one method, two-thirds knew of a source of supply, one-fourth reported that they and their spouses had used contraception sometime in the past, and about one-seventh were current users.

Although a majority of husbands (56 percent) approve of family planning, wives are more likely to favour family planning than their husbands. Since husbands usually have a predominant role in family decision making, the family planning programme should increase efforts to educate and motivate husbands.


PAKISTAN
CHINA
GILGIT
JAMMU &
KASHMIR
(DISPUTED AREA)
PESHAWAR
ISLAMABAD
AFGHANISTAN
N.W.F.P.
LAHORE
PUNJAB
QUETTA
INDIA
BALOCHISTAN
IRAN
SINDH
KARACHI
ARABIAN SEA

CHAPTER 1

INTRODUCTION

Abdul Razzaque Rukanuddin and Tauseef Ahmed

This report gives the major findings of the Pakistan Demographic and Health Survey (PDHS) conducted from December 1990 to May 1991 on a nationwide basis. After the preliminary report, published in August 1991, this is the first in a series of reports on the PDHS findings with the objective of improving the Population Welfare Programme and health services in Pakistan. Besides presenting results at the national level, this report presents information by urban-rural areas and by province. Before presenting the major findings, this chapter discusses the physical features, people, culture, religion, language, population distribution and size, fertility and mortality levels, literacy and educational attainment, economy, population and family planning and health policies and programmes of the country. The objective of this presentation is to make the reader familiar with the historical, geographic, socioeconomic and demographic features of the country.

1.1 Physical Features

Pakistan, situated in the northwestern part of the South Asian subcontinent, obtained independence from the British on August 14, 1947 after the subdivision of the Indian subcontinent. It is a land mass of diversified relief with vast plains in the Indus basin, a rocky expanse of plateaus in the southwest and majestic mountains in the north with beautiful valleys, snow-covered peaks and glaciers. Pakistan extends from 24° to 37°N latitude and from 61° to 75°E longitude. On its east and southeast lies India, to the north and northwest is Afghanistan, to the west is Iran and in the south, the Arabian Sea. It has a common frontier with China on the border of its Gilgit Agency. Tajikistan, formerly in the USSR, is separated from Pakistan by a narrow strip of Afghan territory called Wakhan.

This variety of landscape divides Pakistan into six major regions: the Northern High Mountainous Region, the Western Low Mountainous Region, the Balochistan Plateau, the Potohar Uplands, and the Punjab and Sindh fertile plains. Pakistan is a land of great rivers like the Indus and its tributaries, large dams like Tarbela, and high mountain peaks like K2 (Mount Goodwin Austin - 8,611 metres) and Nanga Parbat (8,126 metres).

1.2 Climate, Rainfall, and Seasons

Pakistan has a continental type of climate, characterized by extreme variations of temperature depending on the topography of the country. Pakistan experiences a general deficiency of rainfall. Although it is in the monsoon region, it is arid, except for the southern slopes of the Himalayas and the submountainous tract where the annual rainfall varies between 76 and 127 cm. Balochistan is the driest part of the country with an average rainfall of 21 cm.

There are four well-marked seasons in Pakistan, namely:

1. Cold season (December to March)
2. Hot season (April to June)
3. Monsoon season (July to September)
4. Post-monsoon season (October to November).

1.3 Administrative Divisions

The total land area of Pakistan is about 796,000 square kilometres. Pakistan is comprised of the provinces of Punjab, North West Frontier, Balochistan and Sindh and the Federally Administered Tribal Areas (FATA) of the north and northwest (see map, page xxiv). Each province is divided into administrative divisions, districts, tehsils and talukas. There were 16 divisions and 72 districts in the country in 1991. Islamabad, the capital of Pakistan, which lies in the northern part of the country at the bottom of the Margala hills near Rawalpindi, is a well-planned city which was constructed beginning in the 1960s.

1.4 People, Culture, Religion, and Language

Pakistan historically attracted migrants from many nations in the northwest and the northeast. These include Dravidians, Aryans, Greeks, Turks, Persians, Afghans, Arabs and Mughals. The dominant racial type in Pakistan is Indo-Aryans.

In the cultural arena, Pakistan has inherited a rich heritage. A highly developed way of life was attained by the people of Pakistan in the Indus Valley Civilization about 5000 years ago which came to an end around 1500 B.C. About 500 B.C., the northern city of Taxila emerged as a famous centre of Buddhist learning and culture which existed for a thousand years.

Pakistan is an ideological state which came into existence as a result of the demand for a separate homeland for the Muslims of the Indian subcontinent. The Muslim majority areas were mostly carved out into Pakistan. Therefore, the large majority of the population of Pakistan is comprised of Muslims. A negligible minority of Hindus is settled mainly in the border districts of Sindh. Christians are widely spread throughout the country and form about three percent of the total population. The Parsis (Zoroastrians), who number about 20,000, are an economically notable minority, mostly settled in Karachi. The constitution of Pakistan guarantees the right of minorities to profess, practice and propagate their religion and every administrative position is open to them with the exception of the Head of State and the Prime Minister.

Urdu is the language most commonly spoken throughout the country. Balochi and Brohi are spoken in most of Balochistan, Pushto in North West Frontier Province (NWFP) and also in some parts of Balochistan, Punjabi in Punjab, and Sindhi in the Province of Sindh. Saraiki is widely spoken in southern Punjab in the districts of Multan, Bahawalpur and Dera Ghazi Khan and adjoining areas in Balochistan, NWFP and Sindh. The medium of education is Urdu but English continues to be used in higher education and professional colleges, particularly in scientific and technical fields. English is widely used for commercial, legal and other official business in the country.

1.5 Population

Population Size

Pakistan is the ninth most populous country in the world after China, India, the former USSR, USA, Indonesia, Brazil, Japan, and Nigeria. The population of Pakistan was 16.6 million at the beginning of the twentieth century (in 1901). By the time of independence in 1947, the population was estimated to have doubled to 32.5 million. In the first decennial census (1951), the population of Pakistan was reported to be 33.8 million while in the last decennial census in 1981 the population size was 84.3 million (see Table 1.1). In 1991, the population was estimated to be around 115 million with males comprising 52.5 percent of the population. The sex ratio of the population is estimated to be 111 males per 100 females. Since independence, the population has increased at an average growth rate of 2.9 percent per annum. The present growth rate of the population is estimated to be around three percent.

Table 1.1 Population size and distribution

Distribution of population, intercensal change and average annual growth rate of population by residence, Pakistan, 1951-1981

Area	Census year 1951	1961	1972	1981
	Population (in 000s)			
Urban	6,019	9,655	16,594	23,841
Rural	27,798	33,324	48,727	60,412
Total	33,817	42,978	65,321	84,254
	Percent distribution			
Urban	17.8	22.5	25.4	28.3
Rural	82.2	77.5	74.6	71.7
Total	100.0	100.0	100.0	100.0
	Intercensal percent change			
Urban		60.4	71.9	43.7
Rural		19.9	46.2	24.0
Total		27.1	52.0	29.0
	Average annual growth rate			
Urban		4.88	4.77	4.38
Rural		1.84	3.32	2.58
Total		2.45	3.67	3.06

Source: Population Census Organisation (1985).

Population Distribution

The population of Pakistan is unevenly distributed among its various provinces. Punjab is the most densely populated province with about one-quarter (26 percent) of the total land area of the country and more than half (56 percent) of the total population. The next most densely populated provinces are Sindh, with less than one-fifth (18 percent) of the land area and 23 percent of the total population and North West Frontier Province (NWFP) and the Federally Administered Tribal Area (FATA) with 13 percent of the land area and 16 percent of the total population. Balochistan, which is the largest province by area (with 44 percent of the total land area), has the lowest proportion of Pakistan's total population (5 percent). The population density in the country increased from 43 persons per square kilometre in 1951 to 106 persons per square kilometre in 1981 and further to around 145 persons per square kilometre in 1991.

Urban-Rural Distribution

Pakistan is predominantly an agricultural country with just over 50 percent of the work force employed in occupations related to agriculture. The 1981 Census reported that 72 percent of the total population lived in rural areas. However, urban growth over the years has been dramatic. The proportion

urban increased from 18 percent in 1951 to 28 percent in 1981. In terms of absolute numbers, the urban population nearly quadrupled from 6.0 million in 1951 to 23.8 million in 1981. However, the intercensal average annual growth rate of the urban population declined from 4.9 percent for the period 1951-61 to 4.4 percent for the period 1972-81, primarily due to a change in the definition of urban areas (see Table 1.1).

1.6 Fertility

Several attempts have been made in Pakistan to estimate fertility rates through direct as well as indirect techniques. A number of estimates have been made based on different sets of data, methods and assumptions. Given the trend in population growth, the inevitability of fertility as an important focus of population studies cannot be overemphasized. But a major problem in Pakistan is the wide variations in fertility estimates derived from different sets of data (Rukanuddin and Farooqui 1988), reflecting problems in data inconsistency due to methodological and procedural differences. For instance, the direct fertility estimates based on the 1975 Pakistan Fertility Survey and the 1984-85 Pakistan Contraceptive Prevalence Survey are lower than the indirect estimates based on the Population Growth Surveys (conducted between 1968 and 1979) and the Pakistan Demographic Surveys (conducted annually since 1984). However, prior demographic surveys confirm the persistence of a high level of fertility in Pakistan but with a gradual decline over time. The principal decline has been observed for the younger age groups and is attributed primarily to an increase in the age at marriage. Changes over time in other proximate determinants of fertility in Pakistan such as contraceptive use and breastfeeding are less conducive to lower fertility. Since 1974, surveys have estimated the crude birth rate to vary from 37 to 43 per thousand population and the total fertility rate to range between 5.9 and 6.9 children per woman.

1.7 Mortality

In Pakistan, the systematic study of trends, levels and differentials in mortality is impeded by a lack of reliable data. Although a system of vital registration has been in existence in the country since the last quarter of the 19th century, the recorded data suffer from errors in coverage and inaccuracies in the information provided. It is estimated that at the time of independence, the crude death rate (CDR) was around 25 to 30 per thousand population. The decline in mortality after the Second World War has been very rapid, with the CDR falling to about 10 to 12 deaths per thousand in the 1980s. This has been due *inter alia* to improvements in the availability of food through higher levels of production, the effective control of procurement and distribution of food grains, and the increasing pace of socioeconomic development. Epidemics have also been eliminated and diseases brought under control with the development of effective public health measures and medical services such as inoculation and vaccination programmes.

The infant mortality rate was around 150 to 180 deaths per thousand live births at the time of independence in 1947. This has declined to less than 100 in 1991, mainly due to improved health services and a successful immunisation programme. Available evidence suggests that slightly more than one-third (36 percent) of all deaths occur during infancy in Pakistan. Moreover, one-third of all infant deaths occur within one week of birth. An additional 22 percent of deaths occur in the second to fourth week. In other words, more than half of infant deaths are neonatal deaths that occur within four weeks of birth. Much could be done to eliminate some of the causes of neonatal deaths such as short birth intervals and high parity births.

Maternal deaths, associated with complications of pregnancy and childbirth, are quite high. Four of five deliveries are attended by traditional birth attendants or elderly women. Repeated and closely spaced pregnancies and births coupled with high parity pregnancies are found to result in a high incidence of maternal deaths. In Pakistan it is estimated that around 500 maternal deaths occur per hundred thousand live births.

Although a gradual decline in mortality has been taking place in the country, health care coverage is still insufficient. Only 55 percent of the population has access to health services. A significant augmentation of services is necessary in order to reduce mortality, especially in rural areas.

The life expectancy at birth has increased from 35-38 years at the time of independence to close to 60 years around 1990. The single largest increase in longevity occurred after the 1960s. In the past, males in Pakistan, on the whole, enjoyed a longer life expectancy (3-4 years longer than females) because of higher female mortality at younger ages and during the reproductive years (although this result might have been affected by differential underreporting of mortality by sex). Recently this difference has been reduced.

1.8 Literacy and Educational Attainment

Pakistan has one of the lowest literacy rates (31 percent) in the world. Moreover, in 1985 there was a wide gap between male (43 percent) and female (18 percent) literacy rates. The lowest female literacy rate (4 percent), as of the 1981 Census, was observed for Balochistan. The literacy rate among rural females was only 2 percent in Balochistan and 4 percent in NWFP (Rukanuddin and Farooqui 1988).

The primary school enrolment ratio is also very low (49 percent). The corresponding figures for males and females are 63 percent and 35 percent, respectively. Primary education in Pakistan is further characterized by drop-out and repeater rates which are considered to be among the highest in the world. Only 50 percent of the students who enter primary school complete the five years of primary school. Students, on the average, go to school for 1.7 years, which is very low compared to the average years of schooling in other developing countries (United Nations Development Programme 1991).

1.9 Economy

Pakistan is intrinsically an agricultural country with more than 70 percent of its population living in rural areas. Agriculture is the largest single sector of the economy, employing more than 50 percent of the labour force. Agriculture accounts for 24 percent of the gross domestic product (GDP) and 70 percent of export earnings (Rukanuddin and Farooqui 1988). Development in agriculture and industry has transformed the economy of Pakistan and moved the country toward self sufficiency in meeting its basic needs.

In 1990-91, the average per capita income in Pakistan was about Rs 9000 (US$400). The average rural monthly income per household in Pakistan is around one-third lower than the per household urban income. Moreover, it has been estimated that about 30 percent of the population in Pakistan live below the poverty line. Pakistan also has a low gross domestic savings rate of 13 percent of the GDP. The average annual growth rate of the GDP during the period 1985-90 was about 5.8 percent.

1.10 Population and Family Planning Policies and Programmes

Pakistan was a pioneer among the most populated developing countries in supporting and implementing family planning activities starting in the 1950s. Concern has been expressed in successive Five-Year Development Plans (1955-60 to 1988-93) about rapid population growth and provisions have been made to support a family planning programme to deal with this burgeoning problem. Different approaches and strategies have been adopted during each plan period to promote the concept of a small family norm and to encourage the use of modern methods of family planning. These strategies have varied in design, coverage, outreach, supervision and guidance. However, due to a lack of consistent government commitment and social and cultural constraints, the programme has not been adequately effective in providing family planning services or generating widespread demand for the adoption of contraceptives. Financial and operational obstacles have also hindered the coverage of the programme, which is in the range of 25-30

percent of the total population. Family planning facilities are more concentrated in urban areas than in rural areas. The fertility inhibiting effect of the family planning programme has been low in Pakistan and contraceptive use has remained low despite the existence of the programme for the last three decades.

The environment for family planning in Pakistan has been quite difficult. Factors which are generally associated with high fertility rates worldwide also pertain to Pakistan: high illiteracy and low educational attainment (particularly among females), poverty, high infant and child mortality, high maternal mortality, a preference for sons, poor access to health facilities, low socioeconomic status of women, ignorance, conservatism, fatalism and religiosity. These factors reinforced one another in maintaining high and stable fertility rates in the country. After many years of effort, the coverage of family planning services does not exceed one-third of the population. Various fertility surveys have found a wide gap between knowledge and the use of contraception in Pakistan. These surveys, however, have also indicated the existence of a potential demand for family planning expressed by Pakistani women (Population Welfare Division 1986).

1.11 Health Policies and Programmes

The Ministry of Health provides health care services through government hospitals and other health outlets. The objective of the health policy is to reduce the incidence of morbidity and mortality by providing preventive and curative care to the whole population. Specific attention is given to reducing infant and child mortality, curtailing severe undernutrition among children and mothers, and improving child survival and safe motherhood.

In order to combat high childhood morbidity and mortality due to infectious and communicable diseases, an immunisation programme was initiated in 1978 to protect infants and young children against six common diseases and pregnant mothers against tetanus. This programme was greatly accelerated in 1982 with the collaboration of the World Health Organisation and UNICEF. The Expanded Programme on Immunisation (EPI) is a major component of this scheme to provide universal immunisation.

High maternal mortality is a priority area for health policy and coverage is provided to mothers through ante- and postnatal services performed at maternal and child health centres. These efforts are complemented by projects focusing on child survival and nutritional status through growth monitoring, adequate food supplementation and the promotion of breastfeeding.

The government is committed to improving the quality of health services and the coverage of primary health care services, especially in the rural areas, through its Basic Health Units and Rural Health Centres. The provincial Health Departments of the respective provinces provide these services through their outlets. It was only in 1991 that the new health policy provided for family planning services to be offered through all health outlets as an integral part of health services.

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CHAPTER 2

SURVEY DESIGN AND IMPLEMENTATION

Tauseef Ahmed, M. D. Mallick and Alfredo Aliaga

This chapter outlines various aspects of the design and implementation of the Pakistan Demographic and Health Survey—namely, the objectives and organisation of the survey, the sample design, the questionnaire design, training and fieldwork, data processing, and implementation.

2.1 Objectives of the Pakistan Demographic and Health Survey

The primary objective of the Pakistan Demographic and Health Survey (PDHS) was to provide national- and provincial-level data on population and health in Pakistan. The primary emphasis was on the following topics: fertility, nuptiality, family size preferences, knowledge and use of family planning, the potential demand for contraception, the level of unwanted fertility, infant and child mortality, breastfeeding and food supplementation practices, maternal care, child nutrition and health, immunisations and child morbidity. This information is intended to assist policy makers, administrators and researchers in assessing and evaluating population and health programmes and strategies. The PDHS is further intended to serve as a source of demographic data for comparison with earlier surveys, particularly the 1975 Pakistan Fertility Survey (PFS) and the 1984-85 Pakistan Contraceptive Prevalence Survey (PCPS).

2.2 Organisation of the Survey

In April, 1990, the National Institute of Population Studies (NIPS), on behalf of the Government of Pakistan, signed a contract with the United States Agency for International Development (USAID) and IRD/Macro International Inc. (IRD), Columbia, Maryland, to carry out the Pakistan Demographic and Health Survey in collaboration with the Federal Bureau of Statistics, Statistics Division, Government of Pakistan. Technical assistance was provided by IRD for all phases of the survey through the Demographic and Health Surveys programme. The survey was funded by the United States Agency for International Development (USAID) and the Government of Pakistan.

2.3 Sample Design

The sample design adopted for the Pakistan Demographic and Health Survey is a stratified, clustered and systematic sample of households. The universe consists of all urban and rural areas of the four provinces of Pakistan as defined in the 1981 Population Census, excluding the Federally Administered Tribal Areas (FATA), military restricted areas, the districts of Kohistan, Chitral and Malakand, and protected areas of North West Frontier Province (NWFP). The population of excluded areas constitutes about 4 percent of the total population.

For the urban sample, the sampling frame used was the master sample prepared by the Federal Bureau of Statistics. This frame was developed by dividing each city/town into enumeration blocks of approximately 200-250 households with detailed and clearly recognizable boundary particulars and maps. The updating of the frame was done on the basis of the information obtained from the 1988 Census of Establishments. For the rural sample, the sampling frame used was the village list published by the 1980 Housing Census. The primary sampling units in the urban domain were enumeration blocks; in the rural domain they were mouzas/dehs/villages.

Sample Size and Allocation

The PDHS sample is a subsample of the Federal Bureau of Statistics master sample, which includes 7,420 primary sampling units (PSUs). Consideration in the selection of the PDHS sample was given to the population parameters and geographic levels for which estimates were required, the resources available, and the expected rate of nonresponse. A sample of 8,019 households (secondary sampling units) was selected for coverage from 408 sample areas (PSUs). The distribution of primary sampling units, secondary sampling units (SSUs), eligible women and eligible husbands and their actual coverage in the four provinces is given in Tables 2.1, 2.2 and 2.3.

Stratification Plan

Cities having a population of 500,000 and above (Faisalabad, Gujranwala, Hyderabad, Karachi, Lahore, Multan, Peshawar, and Rawalpindi) were included to form the domain for the major cities. Quetta, which had a population of less than 500,000 but is the capital of Balochistan, was also included as a major city. For the selection of the sample, each of these cities constituted a separate stratum which was further stratified into low, middle, and high income areas, based on information collected in each enumeration block at the time the urban sampling frame was updated. For the remaining urban cities/towns, divisions of NWFP, Sindh, Punjab and Balochistan were grouped together to form a stratum. For the rural domain, each district in each province was considered a stratum, except in Balochistan where each division constituted a stratum.

A two-stage stratified sample design was adopted for the survey. The sample PSUs from each urban stratum were selected with probability proportional to the number of households. The sample PSUs from each rural stratum were selected with probability proportional to the population enumerated in the 1981 census.

Table 2.1 Sample coverage for urban and rural areas combined

Coverage of primary sampling units (PSUs), secondary sampling units (SSUs), eligible women and eligible husbands, Pakistan 1990-91

	Number of PSUs			Number of SSUs (households)			Number of eligible women			Number of eligible husbands		
Province	Covered	Not covered	Total	Covered	Not covered	Total	Covered	Not covered	Total	Covered	Not covered	Total
Punjab	155	0	155	2598	192	2790	2207	124	2331	461	103	564
Sindh	110	0	110	2071	189	2260	1798	102	1900	364	175	539
NWFP	82	0	82	1609	147	1756	1665	24	1689	313	81	394
Balochistan	60	1	61	915	298	1213	941	43	984	216	44	260
Total	407	1	408	7193	826	8019	6611	293	6904	1354	403	1757

Table 2.2 Sample coverage for urban areas

Coverage of urban primary sampling units (PSUs), secondary sampling units (SSUs), eligible women and eligible husbands, Pakistan 1990-91

Province		Number of PSUs			Number of SSUs (households)			Number of eligible women			Number of eligible husbands		
		Covered	Not covered	Total	Covered	Not covered	Total	Covered	Not covered	Total	Covered	Not covered	Total
Punjab	T	72	0	72	1178	118	1296	995	71	1066	212	56	268
	M	39	0	39	667	71	738	558	51	609	116	36	152
	O	33	0	33	511	47	558	437	20	457	96	20	116
Sindh	T	70	0	70	1167	93	1260	1059	72	1131	206	120	326
	M	49	0	49	835	65	900	755	57	812	147	85	232
	O	21	0	21	332	28	360	304	15	319	59	35	94
NWFP	T	42	0	42	699	57	756	749	12	761	144	51	195
	M	14	0	14	247	23	270	261	5	266	56	25	81
	S	28	0	28	452	34	486	488	7	495	88	26	114
Balochistan	T	41	0	41	558	180	738	581	28	609	134	32	166
	M	18	0	18	234	90	324	246	12	258	61	11	72
	O	23	0	23	324	90	414	335	16	351	73	21	94
Total	T	225	0	225	3602	448	4050	3384	183	3567	696	259	955
	M	120	0	120	1983	249	2232	1820	125	1945	380	157	537
	O	105	0	105	1619	199	1818	1564	58	1622	316	102	418

T = Total
M = Major city
O = Other urban

Table 2.3 Sample coverage for rural areas

Coverage of rural primary sampling units (PSUs), secondary sampling units (SSUs), eligible women and eligible husbands, Pakistan 1990-91

Province	Number of PSUs			Number of SSUs (households)			Number of eligible women			Number of eligible husbands		
	Covered	Not covered	Total	Covered	Not covered	Total	Covered	Not covered	Total	Covered	Not covered	Total
Punjab	83	0	83	1420	74	1494	1212	53	1265	249	47	296
Sindh	40	0	40	904	96	1000	739	30	769	158	55	213
NWFP	40	0	40	910	90	1000	916	12	928	169	30	199
Balochistan	19	1	20	357	118	475	360	15	375	82	12	94
Total	182	1	183	3591	378	3969	3227	110	3337	658	144	802

Households within each sample PSU were considered secondary sampling units (SSUs). A fixed number of SSUs were selected systematically with equal probability using a random start and a sampling interval: 18 SSUs from each PSU in the urban domain in the four provinces and in the rural domain of Punjab Province and 25 SSUs from each PSU in the rural domain of the remaining three provinces of Sindh, NWFP and Balochistan. Unlike previous surveys in Pakistan, the PDHS did not allow the substitution of households in the case of nonresponse.

From the selected sample of SSUs, a systematic subsample of one in three households was chosen for inclusion in the husbands' sample. The husbands of eligible women in these households were eligible to be interviewed, provided that they slept in the household the night before the interview.

The sample was designed to produce reliable estimates of population and health indicators separately for Karachi and for urban and rural areas of Punjab, Sindh, NWFP and Balochistan. This objective required an oversampling of all urban areas as well as the provinces of NWFP, Balochistan and Sindh.

Because of the nature of the PDHS sample, a separate weighting factor was required for every PSU. The weighting procedure has two major components: the design component and the response differential component, with the design component being the major one. The weights were standardized so that the weighted number of completed cases at the national level is equal to the unweighted total. After data entry, weights were applied to the households and individuals in each PSU, to insure that the weighted sample would properly represent the actual geographic distribution of the population of Pakistan. Weights for husbands followed the same methodology as weights for women, except that the husbands' nonresponse rates were used in the calculations.

The target was to interview 8,019 ever-married women age 15-49. The size of the target sample was based on an assumption of 1.1 eligible women per household and a nonresponse rate of 10 percent.

A summary of the distribution of eligible women and eligible husbands by province and urban-rural residence is presented in Tables 2.1, 2.2 and 2.3. In general, the sample was adequate in size and sufficiently representative of the population to provide reliable estimates for the country as a whole, for urban areas, for rural areas, and for each province. However, for smaller groups, the sampling errors are generally higher. The calculated sampling errors for selected variables are shown in Appendix B.

2.4 Questionnaires

Three types of questionnaires were used in the PDHS: the Household Questionnaire, the Woman's Questionnaire and the Husband's Questionnaire (see Appendix D). The contents of the questionnaires were based on the DHS Model B Questionnaire, which is designed for use in countries with low contraceptive prevalence. Additions and modifications to the model questionnaire were made after extensive consultations with related ministries and interested organisations and with members of the PDHS Technical Advisory Committee. The questionnaires were translated from the original English version into the national language (Urdu) and three regional languages (Punjabi, Sindhi and Pushto).

The Household Questionnaire listed all usual residents of a sampled household, plus all visitors who slept in the household the night before the interview. Some basic information was collected on the characteristics of each person listed, including their age, sex, marital status, education and relationship to the head of the household. The main purpose of this section of the Household Questionnaire was to identify women and men who were eligible for the Women's Questionnaire and the Husband's Questionnaire. In addition, the Household Questionnaire collected information on the household itself, such as the source of water, type

of toilet facilities, materials used in the construction of the house, and ownership of various durable consumer goods.

The Woman's Questionnaire was used to collect information from eligible women—that is, all ever-married women age 15-49 who slept in the household the night before the household interview. Eligible women were asked questions about the following topics:

Background characteristics
Reproductive history
Knowledge and use of contraception
Pregnancy and breastfeeding
Vaccinations and the health of children
Marriage
Family size preferences
Husband's background

In addition, interviewing teams measured the height, weight and arm circumference of all respondents' children under age five. The PDHS was the first national survey that collected demographic, health and anthropometric data simultaneously. The questionnaire was designed to be completed in an average interview time of about 60 minutes. The actual mean time for the individual interview was 53 minutes. The interview time ranged from 47 minutes for women with no children born since January 1986 to 60 minutes for women who had three or more children during that period.

Interviews were also conducted with a subsample of husbands of eligible women who were married at the time of the survey. The Husband's Questionnaire consists of a subset of the questions on the Woman's Questionnaire, with particular emphasis on family planning, marriage, and family size preferences.

2.5 Recruitment, Training and Fieldwork

The selection of field teams was done at the regional level in order to insure that interviewers were accustomed to local dialects and cultural norms and were acquainted with localities in adjacent areas. The majority of field interviewers had received either a bachelor's or a master's degree.

In September-October 1990, prior to the main survey, a pretest of the questionnaires and field procedures was carried out. A two-week training session for interviewers and supervisors was conducted at Punjab University, Lahore. The training session was followed by two weeks of fieldwork. A total of 309 pretest interviews were completed in urban and rural areas of all four provinces in Pakistan (Punjab, Sindh, North West Frontier Province, and Balochistan).

Training for the main survey took place in November-December 1990. Training was held simultaneously at the Regional Training Institutes of the Ministry of Population Welfare in three cities—Karachi, Lahore and Peshawar. Staff members from the National Institute of Population Studies, the Federal Bureau of Statistics, the Regional Training Institutes and IRD/Macro International conducted the training sessions.

Participants in the training course included 16 statistical officers from the Federal Bureau of Statistics (FBS) and more than 80 female and male interviewers. The four-week training course consisted of instruction in general interviewing techniques and field procedures, a detailed review of the questionnaires, practice in weighing and measuring children, and practice interviews in the field. Trainees who performed satisfactorily in the training programme were selected as interviewers for the main survey. The female interviewers whose performance was rated as superior were selected as field editors.

The fieldwork for the PDHS was carried out by 15 interviewing teams. Each team consisted of one field supervisor from FBS, one field editor, three female interviewers, one male interviewer and one driver (see Appendix A for a complete list of survey staff). The fieldwork started in December 1990 and was completed by May 1991. Transportation for the field teams was provided by FBS, provincial Population Welfare Departments, and NIPS. Assignment of PSUs to the teams and various logistic decisions were made by the PDHS staff. Each team was allowed a fixed period of time to complete fieldwork in a PSU before moving to the next PSU. All the teams started their fieldwork close to or adjacent to their headquarters.

The main duty of the field editors was to examine the completed questionnaires in the field and ensure that all necessary corrections were made. An additional duty was to examine the on-going interviews and verify the accuracy of information collected on the eligibility of respondents. Throughout the survey, PDHS staff maintained close contact with all 15 teams through direct communication and spot-checking. The objective was to provide support in the field and advice to enhance data quality and the efficiency of interviewers. This objective was accomplished by communicating data problems and possible solutions to the interviewing teams, reminding interviewers about proper probing techniques, and examining the fieldwork of the supervisors. Each team supervisor was provided by FBS with the original household listing and the household sample selected by computer for each designated PSU. In case of any error in the sample information, the supervisors contacted FBS headquarters to resolve the problem.

2.6 Data Entry and Processing

All completed questionnaires for the PDHS were sent to the National Institute of Population Studies for data entry and processing. The data entry operation consisted of office editing, coding, data entry and machine editing. Although field editors examined the completed questionnaires in the field, these were re-edited at the PDHS headquarters by specially trained office editors. This re-examination covered: checking all skip sequences, checking circled response codes, and checking the information recorded in the filter questions. Special attention was paid to the consistency of responses to age questions and the accurate completion of the birth history. A second stage of office editing comprised the assignment of appropriate occupational codes and the addition of commonly mentioned "other" responses to the coding scheme. One supervisor and five data entry operators were responsible for the data entry and computer editing operations. The data were processed using five microcomputers and the DHS data entry and editing programmes written in ISSA (the Integrated System for Survey Analysis). The data entry started in the first week of January 1991, within one week of the receipt of the first set of completed questionnaires. The data entry was done directly from the precoded questionnaires. All data entry and editing operations were completed by July 1991. A series of computer-based checks were done to clean the data and remove inconsistencies. Age imputation was also completed at this stage. As in all DHS surveys, age variables such as current age, age at first marriage, and the ages of all living or dead children were imputed for those cases in which information was missing or incorrect entries were detected.

The PDHS followed the DHS tabulation plan, in order to maintain comparability with other countries where DHS surveys have been conducted. Some additional tables were included to examine special topics included on the modified PDHS questionnaire.

2.7 Field Problems

Every survey is subject to a variety of field problems, which cannot be fully anticipated. The major problems encountered in the PDHS are highlighted below, with a discussion of their possible effects.

Transportation: Each field team was assigned a vehicle to visit dispersed PSUs and to move quickly from one sample area to the next. Unexpected heavy rains during the months of March, April, and May brought landslides and flooding in Punjab, NWFP and Balochistan, causing substantial delays. Tube-boats were, therefore, hired in some areas. Several attempts were made to reach engulfed PSUs. At times, travel on foot for several miles was necessary to reach the designated PSUs.

Security of Teams: The law and order situation in Sindh was at its worst from January through April. Teams in Sindh were advised to take full precautions before going to any disturbed rural PSU. In addition, local security officers had to accompany interviewing teams to several PSUs in Balochistan. One PSU in Balochistan could not be reached by a Sindh team because of the insecure situation and a lack of police protection for the PDHS team.

Supervision: In some instances, the work of certain supervisors was found to be weak: they were not moving to new PSUs as planned; they lacked coordination among team members; they did not dispatch the questionnaires from completed PSUs on time; they gave unauthorized leave to interviewers; they sent in an incomplete set of questionnaires; and at times they did not help female interviewers to locate sample households.

Funds: Funds for the fieldwork were often not released by responsible agencies in a timely fashion. These delays caused frustration for interviewers as they had to rely on borrowed money rather than their own salaries. A loan of Rs. 2 million from the Ministry of Population Welfare provided timely relief and facilitated the full execution of the fieldwork.

Timing: The actual fieldwork was planned to be completed before the month of Ramadan which started in March 1991. Due to the unfortunate delays caused by heavy rains, almost all teams worked throughout the month of Ramadan without any break.

Noncooperation: In a few areas in NWFP and Sindh, where the main cash crop is poppies or where dacoits reside, almost all households were apprehensive about talking to the interviewers, especially when questions were asked about household members and the ownership of durable consumer goods. PDHS team members were sometimes mistaken for members of the narcotics board or as television license examiners.

Cultural Norms: In several PSUs in Balochistan and NWFP, respondents willingly completed the interview but refused to allow anthropometric measurements to be taken. Most women did not want any outsider to touch their children. Moreover, mothers did not want others to know the weight and height of their children to protect them from the *evil eye*.

Sample Selection: The sample for the PDHS was selected at FBS headquarters. Some errors were detected in the sampling interval for households in the overall sample and in the husbands' sample. These problems caused some delays and confusion in the field. Most of these problems resulted in short-term difficulties but did not deter the overall progress of the project.

2.8 Coverage of the Survey

Tables 2.4 and 2.5 show the results of the household and individual interviews for the women's sample and the husbands' sample. A total of 8,019 households were selected for the women's sample. About 90 percent of the selected households were successfully contacted and interviewed. The shortfall was primarily due to dwellings that were vacant or households which were absent when they were visited by interviewers. Of the 7,404 households found to be occupied (including listed dwellings that could not be found), 97 percent were successfully interviewed. In other words, once a household was contacted, it was

Table 2.4 Results of the household and individual interviews for the women's sample

Percent distribution of households and eligible women in the women's sample by results of the household and individual interviews, and response rates, according to residence and province, Pakistan 1990-91

Result of interview and response rate	Residence				Province				
	Total urban	Major city	Other urban	Rural	Punjab	Sindh	NWFP	Balochistan	Total
Selected households for women's sample									
Completed (C)	88.9	88.8	89.1	90.5	93.1	91.6	91.6	75.4	89.7
Household present but no competent respondent at home (HP)	0.9	1.0	0.7	1.0	0.9	1.9	0.2	0.5	1.0
Refused (R)	1.0	1.4	0.4	0.4	0.9	0.7	0.5	0.7	0.7
Dwelling not found (DNF)	1.0	0.6	1.6	0.9	0.4	0.1	0.2	5.0	1.0
Household absent (HA)	2.6	2.6	2.7	2.2	0.6	2.6	1.8	7.1	2.4
Dwelling vacant/address not a dwelling (DV)	4.6	4.9	4.2	3.1	3.2	2.6	3.2	8.7	3.9
Dwelling destroyed (DD)	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.1	0.2
Other (O)	0.7	0.5	1.0	1.6	0.7	0.2	2.2	2.5	1.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4050	2232	1818	3969	2790	2260	1756	1213	8019
Household response rate for women's sample (HRR)[1]	96.8	96.7	97.0	97.5	97.7	97.2	99.1	92.3	97.2
Eligible women									
Completed (EWC)	94.7	93.5	96.2	96.7	94.7	94.6	98.6	95.1	95.7
Not at home (EWNH)	2.3	2.9	1.5	1.9	2.1	4.0	0.7	0.8	2.1
Refused (EWR)	1.7	2.3	1.0	0.7	1.9	0.8	0.5	1.7	1.2
Partly completed (EWPC)	0.5	0.6	0.3	0.3	0.9	--	--	0.5	0.4
Other (EWO)	0.8	0.7	0.9	0.4	0.4	0.6	0.3	1.9	0.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3572	1947	1625	3338	2331	1900	1689	990	6910
Eligible women response rate (EWRR)[2]	95.5	94.2	97.1	97.1	95.0	95.2	98.9	96.9	96.3
Overall response rate for women (ORRW)[3]	92.5	91.0	94.2	94.7	92.9	92.5	98.0	89.5	93.5

-- Less than 0.05 percent

[1]Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{C}{C + HP + R + DNF}$$

[2]Using the number of eligible women falling into specific response categories, the eligible women response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC + EWNH + EWR + EWPC}$$

[3]The overall response rate for women (ORRW) is calculated as:

$$ORRW = HRR * EWRR$$

Table 2.5 Results of the household and individual interviews for the husbands' sample

Percent distribution of households and eligible husbands in the husbands' sample by results of the household and individual interviews, and response rates, according to residence and province, Pakistan 1990-91

Result of interview and response rate	Residence				Province				
	Total urban	Major city	Other urban	Rural	Punjab	Sindh	NWFP	Balochistan	Total
Selected households for husbands' sample									
Completed (CH)	90.0	89.8	90.3	90.7	93.0	91.4	93.8	77.0	90.3
Household present but no competent respondent at home (HPH)	0.7	0.7	0.8	1.2	1.0	2.0	--	0.5	1.0
Refused (RH)	1.1	1.6	0.5	0.4	1.0	0.8	0.3	1.0	0.8
Dwelling not found (DNFH)	0.8	0.7	1.0	0.8	0.1	0.3	--	4.7	0.8
Household absent (HAH)	2.3	2.3	2.3	1.9	0.4	2.1	1.7	6.4	2.1
Dwelling vacant/address not a dwelling (DVH)	4.1	4.3	4.0	3.3	3.3	3.0	2.0	8.4	3.7
Dwelling destroyed (DDH)	--	--	--	0.4	0.1	0.4	0.2	--	0.2
Other (OH)	0.9	0.7	1.2	1.3	1.1	--	2.0	2.0	1.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1351	745	606	1342	930	760	598	405	2693
Household response rate for husbands' sample (HRRH)[1]	97.1	96.8	97.5	97.4	97.9	96.8	99.6	92.6	97.2
Eligible husbands									
Completed (EHC)	72.9	70.8	75.6	82.0	81.7	67.5	79.4	83.1	77.1
Not at home (EHNH)	23.9	25.7	21.5	15.1	16.3	29.9	16.5	11.9	19.9
Postponed (EHP)	0.3	--	0.7	--	--	--	--	1.2	0.2
Refused (EHR)	1.6	2.0	1.0	0.9	0.9	0.9	1.8	1.9	1.3
Partly completed (EHPC)	0.3	0.4	0.2	0.5	0.5	0.4	0.3	0.4	0.4
Other (EHO)	1.0	1.1	1.0	1.5	0.5	1.3	2.0	1.5	1.3
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	955	537	418	802	564	539	394	260	1757
Eligible husbands response rate (EHRR)[2]	73.7	71.6	76.3	83.3	82.2	68.4	81.1	84.4	78.0
Overall response rate for husbands (ORRH)[3]	71.6	69.3	74.4	81.1	80.5	66.2	80.8	78.2	75.8

-- Less than 0.05 percent

[1]Using the number of households falling into specific response categories, the household response rate for the husbands' sample (HRRH) is calculated as:

$$\frac{CH}{CH + HPH + RH + DNFH}$$

[2]Using the number of eligible husbands falling into specific response categories, the eligible husbands' response rate (EHRR) is calculated as:

$$\frac{EHC}{EHC + EHNH + EHP + EHR + EHPC}$$

[3]*The overall response rate for husbands (ORRH) is calculated as:*

$$ORRH = HRRH * EHRR$$

almost certain to complete the household interview. The highest response rate for the household interview was recorded for NWFP (99 percent); the lowest was recorded for Balochistan (92 percent). In more than 15 percent of the cases in Balochistan, either the dwellings were vacant or the households were absent due to the temporary migration of households because of severe cold weather in that region.

In the interviewed households, 6,910 women were identified as eligible for the individual interview. Interviews were successfully completed for 96 percent of the eligible women. The difference between the number of women targeted for interviewing and actual contacts was mainly due to the fact that the actual number of eligible women per household was lower than assumed in the sample design. The principal reason for nonresponse among eligible women was the failure to find them at home, despite repeated visits to the household. The refusal rate was low (only 1.2 percent).

A sample of 1,757 husbands of eligible women was identified as being eligible for the husbands' interview. However, only 77 percent of eligible husbands could be contacted and have interviews completed. The response rate was particularly low in Sindh where almost one-third of eligible husbands were not at home and in major cities where one-quarter of husbands were not at home. The major reason for the high level of nonresponse among husbands was their absence from the households and the fact that male interviewers could not contact them even after several visits.

CHAPTER 3

CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

Tauseef Ahmed and Syed Mubashir Ali

A profile of the demographic and socioeconomic characteristics of the population in the sample households is presented in this chapter to provide background information about the respondents interviewed in the PDHS. The characteristics of the population are compared with those reported from earlier surveys and censuses, wherever possible, to examine differentials and trends.

3.1 Household Composition

Data on the household composition of the de jure population are presented for urban and rural areas in Table 3.1. The results show that households in Pakistan are predominantly headed by males.[1] Only seven percent of all households are headed by females. This figure is slightly higher than the corresponding six percent obtained in the 1979-80 Population, Labour Force and Migration Survey.

Pakistani households tend to be large with an average of six to seven persons living and eating together in a single household. The typical household in Pakistan has an average of 6.7 persons, but about one-quarter (26 percent) of all households have four or fewer members. The breakdown by place of residence shows that there are more members in urban households (7.2 persons) than in rural households (6.5 persons). These results are consistent with the findings of the Pakistan Contraceptive Prevalence Survey (PCPS) and the Population, Labour Force and Migration Survey (PLM). The lower mean size of households in rural areas could be due partly to the migration of some household members to urban areas.

Joint and extended family living arrangements are the norm in Pakistan. More than 60 percent of households have three or more related adults, while one-third have two related adults. Only one household in twenty had just one adult among the usual residents of the household.

Another topic for which data are generally not available in Pakistan is the extent to which children live with families other than their own parents. In the PDHS, only one percent of households contained children under 15 years of age, who were not living with either of their natural parents. Many of these children are likely to be domestic servants, although some may be adopted or foster children.

[1]Respondents to the household questionnaire were asked to identify the head of the household themselves. No standard definition was provided since the objective was to determine who was the head of the household according to the respondent's own definition of that concept.

Table 3.1 Household composition

Percent distribution of households by sex of head of household, household size, and kinship of household members, and the percentage of households with children not living with either of their natural parents, according to urban-rural residence, Pakistan 1990-91

Household characteristic	Total urban	Major city	Other urban	Rural	Total
Household head					
Male	92.1	93.0	90.9	93.2	92.9
Female	7.9	7.0	9.1	6.8	7.1
Total	100.0	100.0	100.0	100.0	100.0
Number of usual members					
1	1.9	1.5	2.7	3.4	2.9
2	4.6	4.3	5.1	6.6	6.0
3	6.4	6.2	6.7	7.8	7.4
4	8.5	9.6	6.9	9.9	9.5
5	11.6	11.6	11.7	12.5	12.3
6	13.5	14.1	12.7	13.3	13.4
7	12.4	12.7	12.0	11.6	11.8
8 +	12.6	11.6	14.0	11.6	11.9
Total	28.5	28.7	28.2	23.2	24.8
	100.0	100.0	100.0	100.0	100.0
Mean size	7.2	7.2	7.2	6.5	6.7
1979-80 PLM mean size	6.6	U	U	6.1	6.3
1984-85 PCPS mean size	7.3	7.4	7.2	6.7	6.9
Kinship of household members					
One adult	3.0	2.2	4.2	5.4	4.7
2 related adults opposite sex	27.8	27.6	28.0	32.9	31.4
2 related adults same sex	1.4	1.3	1.6	1.7	1.6
3+ related adults	65.8	65.9	65.7	59.5	61.4
Other	1.9	3.0	0.6	0.5	0.9
Total	100.0	100.0	100.0	100.0	100.0
Percentage of households with children not living with either of their natural parents	1.0	0.6	1.6	1.1	1.1
Number of households	2120	1202	918	5073	7193

U = Unknown; no information

3.2 Age-sex Distribution of the Household Population

As in many developing countries, data collection efforts in Pakistan are subject to age misreporting and heaping on certain ages due to digit preference. Because of these limitations, special attention was paid in the PDHS to minimizing age reporting errors. Interviewers were given training in the techniques of probing to elicit age information that is as accurate as possible. Interviewers were also provided with reference calendars to help them in determining an approximate age for those respondents who were not able to report their exact age or date of birth. One calendar listed the dates of major national and local events for the last fifty years. Another calendar showed how to convert seasonal and Islamic months into dates in the

Gregorian calendar. Finally, interviewers were provided with an age conversion table to allow them to check the consistency of age and date of birth responses. In most rural areas, where knowledge about ages and dates of birth is not the norm, the PDHS interviewers were largely successful in estimating age information by using the calendars or calculating the ages of individuals relative to the age of any household member whose age could be determined. Nevertheless, errors in recording ages and dates of birth could not be totally eliminated.

Table 3.2 shows the age distribution of the de facto male and female population enumerated in the PDHS and sex ratios by five-year age groups. Because of continuing high levels of fertility, Pakistan's population is relatively young (see Figure 3.1). The median age of the de facto population is 17.6 years. Some age misreporting is evident from an examination of the age distributions. The sex ratios further help to highlight some of the errors in the data. The overall sex ratio for Pakistan is 1.08 males for each female. The sex ratios for the population as a whole are fairly stable up to age 40-44, but rather erratic thereafter. The relatively high sex ratio at age 45-49 (particularly in urban areas) suggests that in some cases interviewers may have "aged" women in that age group across the 50-year age boundary so that the women would be ineligible for the individual interview.

Table 3.2 Household population by age, residence and sex

Percent distribution of the de facto household population by five-year age group, according to urban-rural residence and sex, Pakistan 1990-91

	Total urban			Major city			Other urban			Rural			Total		
Age group	Male	Female	Sex ratio	Male	Female	Sex ratio	Male	Female	Sex ratio	Male	Female	Sex ratio	Male	Female	Sex ratio
0-4	12.6	13.6	0.98	12.3	13.7	0.95	13.0	13.4	1.02	13.4	13.6	1.08	13.2	13.6	1.05
5-9	15.2	16.5	0.97	14.7	15.5	1.00	16.0	17.9	0.94	18.2	17.9	1.11	17.3	17.5	1.07
10-14	13.4	14.3	0.99	12.8	14.1	0.96	14.2	14.6	1.02	13.9	13.3	1.14	13.8	13.7	1.09
15-19	11.7	11.3	1.09	11.8	11.5	1.08	11.5	11.1	1.10	9.7	9.5	1.11	10.3	10.1	1.10
20-24	9.0	8.7	1.10	9.6	9.4	1.07	8.3	7.6	1.15	7.4	8.0	1.02	7.9	8.2	1.05
25-29	7.2	7.5	1.02	7.7	7.8	1.04	6.6	7.0	0.98	6.3	7.7	0.90	6.6	7.6	0.94
30-34	5.5	5.5	1.06	5.4	5.3	1.07	5.7	5.7	1.05	5.3	5.5	1.05	5.3	5.5	1.05
35-39	5.3	5.0	1.12	5.6	5.3	1.10	5.0	4.6	1.16	4.2	4.3	1.07	4.6	4.5	1.09
40-44	4.1	3.7	1.16	4.3	3.7	1.20	3.8	3.6	1.11	4.0	4.1	1.06	4.0	4.0	1.09
45-49	3.6	2.7	1.43	3.9	2.5	1.65	3.3	2.9	1.18	3.1	2.8	1.20	3.2	2.7	1.27
50-54	2.9	3.6	0.86	3.1	3.3	0.98	2.8	4.0	0.74	2.8	3.7	0.83	2.9	3.7	0.84
55-59	2.1	2.2	1.04	2.1	2.2	1.01	2.2	2.1	1.09	2.1	3.0	0.78	2.1	2.7	0.85
60-64	2.6	2.2	1.24	2.7	2.3	1.21	2.6	2.1	1.28	3.2	2.5	1.38	3.0	2.4	1.34
65-69	1.6	1.1	1.51	1.5	1.2	1.38	1.6	1.0	1.70	1.9	1.7	1.21	1.8	1.5	1.28
70-74	1.5	1.0	1.47	1.3	1.1	1.28	1.6	1.0	1.75	2.5	1.2	2.36	2.2	1.1	2.09
75-79	0.5	0.2	2.37	0.5	0.2	3.20	0.4	0.3	1.67	0.6	0.4	1.57	0.6	0.3	1.73
80 +	1.1	0.9	1.20	0.9	0.9	1.10	1.3	1.0	1.32	1.5	0.8	2.08	1.4	0.8	1.76
Missing/ Don't know	0.1	--	*	--	--	*	0.1	0.1	*	0.1	0.1	*	0.1	0.1	1.38
Total	100.0	100.0	1.06	100.0	100.0	1.06	100.0	100.0	1.05	100.0	100.0	1.10	100.0	100.0	1.08
Number	7480	7089	14569	4303	4070	8373	3177	3019	6196	16293	14876	31169	23773	21965	45737

-- Less than 0.05 percent

* Based on fewer than 25 unweighted cases. Number not shown.

Figure 3.1
Population Pyramid of Pakistan

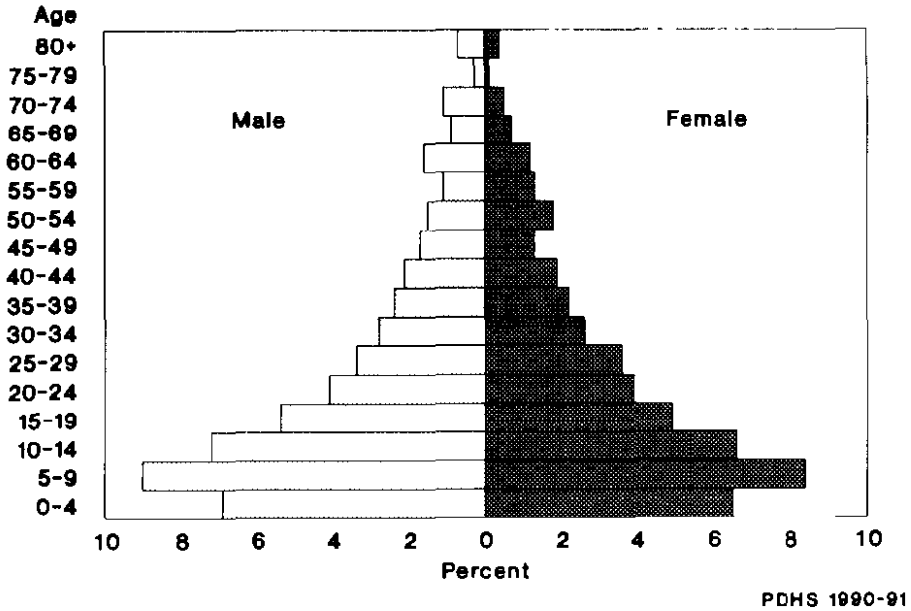


Table 3.3 Population by age from selected sources

Percent distribution of the population by age group, 1990-91 PDHS, 1984-85 PCPS and 1981 census

Age	1990-91 PDHS	1984-85 PCPS	1981 census
0-4	13.4	16.4	15.3
5-9	17.4	16.3	16.0
10-14	13.7	12.8	13.2
15-19	10.2	10.1	9.5
20-24	8.1	8.0	7.6
25-29	7.1	6.9	6.7
30-34	5.4	5.3	5.6
35-39	4.6	4.9	5.1
40-44	4.0	4.1	4.7
45-49	3.0	3.2	3.7
50-54	3.2	3.1	3.6
55-59	2.4	2.3	2.0
60-64	2.7	2.6	2.7
65-69	1.7	1.3	1.2
70-74	1.7	1.3	1.4
75 and over	1.6	1.4	1.7
Total	100.0	100.0	100.0

Source: Original data from Pakistan Contraceptive Prevalence Survey; Population Census Organisation (1984)

The overall distribution of the population by age is quite similar to that of the 1981 census and previous demographic surveys (see Table 3.3). The percentage of the population below age five, however, is smaller in the PDHS than in the other sources. This shift in age composition can be attributed partly to a reduction in fertility levels in the recent past. However, some of this shift is due to the omission of young children and displacement in their ages, particularly in rural areas (see the discussion of omission and age displacement in Chapter 4). It is interesting to note that despite substantial differences among the three sources in the first three age categories, the percentage of the total population that is under age 15 years of age is exactly the same (44.5 percent) in the 1981 census and in the PDHS.

3.3 Marital Status

The PDHS gathered information on the marital status of all household members age 15 and over. Examination of the marital status data for the de facto population (see Table 3.4) reveals a consistent picture,

Table 3.4 Household population by age, sex and marital status

Percent distribution of the de facto household population by marital status, according to age and sex, Pakistan 1990-91

MALE

Age group	Never married	Married	Widowed	Divorced/ separated	Missing	Total	Number
15-19	93.8	3.5	0.0	0.0	2.6	100.0	2448
20-24	75.3	23.1	0.4	0.0	1.2	100.0	1883
25-29	38.7	59.4	0.9	0.3	0.7	100.0	1561
30-34	15.1	82.2	1.6	0.5	0.6	100.0	1269
35-39	7.6	90.8	1.1	0.5	--	100.0	1083
40-44	2.8	93.3	2.5	1.4	--	100.0	951
45-49	2.0	93.4	3.7	1.0	--	100.0	766
50-54	2.1	92.8	4.5	0.6	--	100.0	678
55-59	1.8	93.3	4.6	--	0.3	100.0	506
60-64	0.7	87.8	11.1	0.3	0.1	100.0	708
65+	1.0	78.2	19.3	0.9	0.5	100.0	1398
Total	35.3	59.5	3.8	0.4	0.9	100.0	13265

FEMALE

Age group	Never married	Married	Widowed	Divorced/ separated	Missing	Total	Number
15-19	78.1	18.4	0.3	0.2	3.0	100.0	2219
20-24	39.4	59.7	0.1	0.6	0.2	100.0	1798
25-29	11.8	86.0	0.9	1.0	0.4	100.0	1669
30-34	3.8	93.2	1.5	1.6	--	100.0	1207
35-39	2.0	93.1	3.9	0.9	--	100.0	996
40-44	2.3	92.7	4.6	0.3	--	100.0	871
45-49	2.0	90.5	7.3	0.2	--	100.0	602
50-54	0.7	81.8	15.5	2.0	0.1	100.0	805
55-59	0.3	77.3	21.4	0.7	0.2	100.0	597
60-64	0.5	72.1	26.2	0.1	1.1	100.0	528
65+	0.3	48.1	48.9	0.3	2.4	100.0	839
Total	22.6	67.8	8.0	0.7	0.9	100.0	12143

Note: Total includes 14 males and 10 females whose age is unknown.
-- Less than 0.05 percent

relative to previous surveys, with regard to the universality of marriage for both males and females. Almost all females get married by their early thirties and males by their early forties. However, women tend to get married much earlier than men. For example, 60 percent of women age 20-24 are currently married but only 23 percent of men in that age group are married. Females exhibit an earlier transition than males to widowhood or to being divorced or separated. This finding is consistent with the cultural norm which permits the remarriage of widowed or divorced men but discourages the remarriage of women. The earlier transition of women to widowhood is also due to the age difference between husbands and wives and to higher male mortality in the older age groups. Nearly half of all women age 65 and over are widows, whereas only 19 percent of men in that age group are widowers.

3.4 Educational Attainment

The level of educational attainment in a society is an important indicator of social development. Moreover, education is considered to be a major factor underlying social status. Educational attainment has also been shown to have a significant effect on fertility behaviour, contraceptive use, infant and child mortality, morbidity and issues related to family health and hygiene. Table 3.5 presents the distribution of the household population age five and over by level of education, according to sex, age, place of residence and province.

Education has been one of the few neglected sectors which has not caught up with the growing population in Pakistan. Table 3.5 shows that 43 percent of males and 68 percent of females have never attended school. Overall, less than one-third of males (30 percent) and one-fifth of females (20 percent) have attended only primary school, while 16 percent of males and 7 percent of females were reported to have reached secondary school or higher. On average, males have completed 3.2 years of schooling, whereas females have completed only 1.6 years. The data indicate that males receive much more education than females. Such differentials are more prominent at higher levels of education. Men are 50 percent more likely than women to have attended only primary school, twice as likely to have attended middle school without going on to secondary school, and 2.3 times as likely to have attended secondary school or higher education.

The differentials in level of education according to age group provide an indication of the development in the educational attainment of the population over time. A steadily increasing percentage of both males and females have attended school and the increases are particularly dramatic at the secondary level of education and above. The sex differential in educational attainment continues to be significant for all ages, with little indication that the gap is decreasing, except in the youngest age group.

The findings further indicate that one-half of males (51 percent) and four-fifths of females (79 percent) in rural areas have received no education. Among both males and females, the relative urban-rural differentials are most pronounced at the highest educational level. The median and mean number of years of schooling are slightly higher in major cities than in other urban areas. The urban-rural difference is undoubtedly due to a lack of facilities or their inaccessibility in rural areas, while male-female differentials could be attributed to cultural norms and the social constraints faced by women. Punjab and Sindh have relatively low percentages of females who have received no education, while in NWFP and Balochistan more than 80 percent of females have never been to school. The level of educational attainment is much higher for males than for females in all provinces, but the disparity is particularly striking in NWFP.

The PDHS also asked about the current status of school attendance for all persons under age 25. Table 3.6 presents the percentage of the de facto male and female population (age 6-24) who are enrolled in school by age, sex and place of residence. Overall, more than half (54 percent) of all school age children (age 6-15) were currently enrolled in school; the figures were 64 percent for males and 44 percent for females. The enrolment rate is much higher in major cities (75 percent) than in rural areas (46 percent) (see Figure 3.2).

Table 3.5 Educational level of household population

Percent distribution of the de facto male and female household population age five and over by highest level of education attended, according to selected background characteristics, Pakistan 1990-91

MALE

Background characteristic	No education	Primary	Middle	Secondary+	Missing	Total	Number of persons	Median years	Mean years
Age group									
5-9	44.4	54.8	0.4	--	0.4	100.0	4102	0.7	0.6
10-14	23.8	51.4	20.0	4.5	0.3	100.0	3274	3.6	3.2
15-19	28.4	17.8	20.8	32.6	0.3	100.0	2448	6.3	5.3
20-24	33.9	19.1	13.2	33.5	0.3	100.0	1883	5.7	5.4
25-29	39.7	20.7	12.4	27.1	0.1	100.0	1561	5.2	4.8
30-34	45.5	16.7	11.3	26.0	0.4	100.0	1269	4.4	4.4
35-39	44.7	17.1	10.2	27.7	0.3	100.0	1083	4.5	4.5
40-44	50.6	20.2	8.1	20.9	0.2	100.0	951	0.0	3.8
45-49	54.3	14.3	8.7	22.3	0.4	100.0	766	0.0	3.7
50-54	61.6	15.9	6.1	16.0	0.4	100.0	678	0.0	2.9
55-59	64.6	17.2	6.1	11.4	0.8	100.0	505	0.0	2.4
60-64	73.8	11.3	5.6	9.3	0.1	100.0	708	0.0	1.8
65+	80.1	9.3	5.0	5.2	0.4	100.0	1398	0.0	1.3
Residence									
Total urban	26.9	29.8	13.7	29.4	0.3	100.0	6535	5.0	5.0
Major city	27.0	27.0	13.4	32.3	0.2	100.0	3772	5.2	5.2
Other urban	26.7	33.5	14.0	25.6	0.3	100.0	2763	4.7	4.6
Rural	50.7	29.8	9.3	9.8	0.4	100.0	14106	0.0	2.4
Province									
Punjab	40.8	30.2	12.0	16.9	0.1	100.0	12330	1.8	3.4
Sindh	44.0	31.5	7.8	16.0	0.7	100.0	4962	1.0	3.2
NWFP	46.7	27.6	11.0	14.4	0.2	100.0	2597	1.0	3.0
Balochistan	63.4	20.8	6.6	7.1	2.0	100.0	752	0.0	1.7
Total	43.1	29.8	10.7	16.0	0.3	100.0	20641	1.3	3.2

FEMALE

Background characteristic	No education	Primary	Middle	Secondary+	Missing	Total	Number of persons	Median years	Mean years
Age group									
5-9	58.7	40.7	0.1	--	0.4	100.0	3840	0.0	0.4
10-14	48.5	35.5	12.4	3.2	0.5	100.0	2998	1.0	2.1
15-19	54.9	15.5	10.5	18.9	0.2	100.0	2219	0.0	3.2
20-24	63.9	13.6	6.4	16.1	0.1	100.0	1798	0.0	2.8
25-29	72.0	10.0	5.0	12.9	--	100.0	1669	0.0	2.2
30-34	75.3	10.4	4.0	9.5	0.7	100.0	1207	0.0	1.8
35-39	79.0	9.1	4.8	6.9	0.2	100.0	996	0.0	1.5
40-44	83.4	7.0	3.3	6.0	0.3	100.0	871	0.0	1.2
45-49	86.3	6.5	2.8	3.4	1.0	100.0	602	0.0	0.9
50-54	93.0	3.0	1.9	1.7	0.4	100.0	805	0.0	0.5
55-59	92.8	3.9	1.5	1.0	0.7	100.0	597	0.0	0.4
60-64	94.5	1.8	1.3	1.6	0.9	100.0	528	0.0	0.3
65+	95.3	2.2	0.3	0.9	1.4	100.0	839	0.0	0.2
Residence									
Total urban	42.8	28.4	10.5	18.0	0.3	100.0	6126	1.5	3.4
Major city	37.6	28.9	11.6	21.6	0.3	100.0	3511	2.8	4.0
Other urban	49.9	27.6	9.0	13.2	0.2	100.0	2615	0.9	2.7
Rural	79.4	15.8	2.6	1.6	0.5	100.0	12855	0.0	0.7
Province									
Punjab	63.7	22.2	6.1	7.7	0.2	100.0	11389	0.0	1.8
Sindh	66.2	20.2	4.6	8.2	0.8	100.0	4345	0.0	1.7
NWFP	81.6	12.2	3.0	2.9	0.3	100.0	2570	0.0	0.8
Balochistan	88.5	7.1	1.4	1.2	1.8	100.0	676	0.0	0.4
Total	67.6	19.9	5.2	6.9	0.4	100.0	18981	0.0	1.6

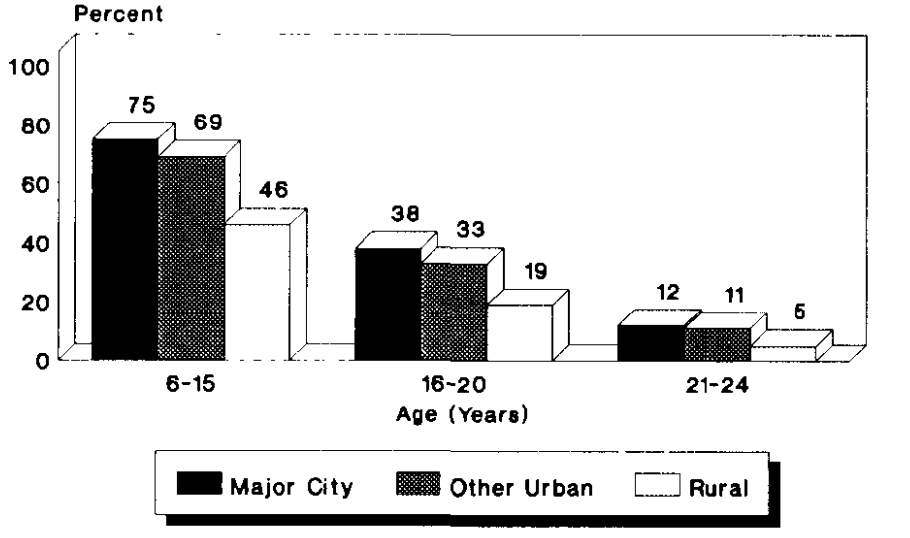
Note: Excludes 14 males and 10 females whose age is unknown.
-- Less than 0.05 percent

Table 3.6 School enrolment

Percentage of the de facto household population 6-24 years of age currently enrolled in school by age, sex and urban-rural residence, Pakistan 1990-91

Age group	Male					Female					Total				
	Total urban	Major city	Other urban	Rural	Total	Total urban	Major city	Other urban	Rural	Total	Total urban	Major city	Other urban	Rural	Total
6-15	76.3	75.8	76.9	58.6	63.8	68.1	73.3	61.9	31.9	43.6	72.2	74.6	69.2	46.1	54.1
6-10	78.1	77.9	78.4	56.8	62.6	71.7	75.5	67.1	33.2	44.8	74.9	76.7	72.7	45.7	54.1
11-15	74.1	73.4	75.0	61.4	65.5	63.8	70.6	55.8	29.8	41.8	68.9	72.0	65.1	46.8	54.2
16-20	40.8	41.5	39.8	32.4	35.4	31.2	35.1	24.8	5.4	14.3	36.1	38.3	32.8	19.0	25.0
21-24	15.4	15.9	14.6	8.6	11.1	7.2	8.1	5.7	1.9	3.9	11.6	12.2	10.5	5.4	7.7

Figure 3.2
School Enrolment by Age
and Place of Residence



PDHS 1990-91

Since the concentration of the population is relatively high in urban areas, there is a greater incentive for both public and private agencies to invest in setting up schools. The increased school enrolment in urban areas is likely to be a function of the greater availability and easy accessibility of educational institutions in general as well as higher educational aspirations for children in urban areas.

At age 16-20, one in four children was still attending school. By age 21-24, fewer than one in ten was still in school. Table 3.6 shows the greater enrolment of male than female children at all ages. The sex differentials in enrolment are more pronounced in rural areas, and to some extent in small cities and towns, but nearly disappear in major cities. The sex differentials in enrolment increase with age, which at least partially reflects the greater dropout rate for female children.

3.5 Housing Characteristics

Selected housing characteristics are shown in Table 3.7 for households with at least one eligible woman who completed the interview. Electricity is nearly universal in urban areas (96 percent) while less than half of rural households (47 percent) were reported to have electricity. Overall, 61 percent of all households have electricity.

The questionnaire included information on the source of drinking water for the household. A safe, accessible source of drinking water is important for the health and welfare of household members. Table 3.7 shows that only 18 percent of all households have water piped inside their houses and 9 percent have water piped onto their property. In total, more than 90 percent of all households in major cities have access to running piped water. Piped water is available to only 63 percent of households in other urban areas and 15 percent of households in rural areas. In rural areas, nearly 70 percent of households obtain their drinking water from wells and tubewells, while 13 percent rely on rivers, canals and karezes for their drinking water.

The use of different types of sanitation facilities varies greatly by place of residence. About 90 percent of all households in major cities have flush toilets in their houses compared to 55 percent in other urban areas.[2] In contrast, the toilet facilities in rural areas are quite rudimentary. Seventy-two percent of rural households have no toilet facility at all and an additional 22 percent have only a pit latrine or a bucket.

One of the more important socioeconomic indicators for survey households is the quality of their housing, as measured by the construction material of the walls and roofs. More than 92 percent of households in major cities have baked brick and cement walls, compared to only two-thirds of households in other urban areas. In contrast, 60 percent of rural households live in houses with mud or unbaked brick walls and about 16 percent of their houses have wooden or bamboo walls. Similarly, a large majority of households in major cities (73 percent) live in houses with roofs made of concrete or T-irons or wood with bricks. Fifty-eight percent of households in other urban areas live in houses which have the same type of roofing materials. The other extreme is reported in rural households, where the roofs of houses are made primarily of wood or bamboo (72 percent). At the national level, a little more than one-third of households live in houses with cement and baked brick walls and roofs made with concrete or bricks with T-irons.

Finally, the number of persons per room used for sleeping was calculated as a measure of crowding. At the national level, only 20 percent of households have 1-2 persons per room and 37 percent of households have 3-4 persons sleeping in one room. At the other extreme, 20 percent of households have seven or more persons sleeping in one room. On the average, five persons sleep in one room. The degree of crowding was nearly as great in urban areas as in rural areas.

[2] Flush toilets are defined as toilets in which water is carried down waste pipes, whether the water is piped into the toilet or poured in by buckets.

Table 3.7 Housing characteristics

Percent distribution of households with eligible women by housing characteristics, according to urban-rural residence, Pakistan 1990-91

Housing characteristic	Total urban	Major city	Other urban	Rural	Total
Electricity					
Yes	95.7	98.1	92.5	46.6	61.4
No	4.3	1.9	7.5	53.4	38.6
Total	100.0	100.0	100.0	100.0	100.0
Source of drinking water					
Piped into residence	48.1	58.5	34.1	5.5	18.3
Piped onto property	20.3	20.1	20.6	4.4	9.2
Public tap	11.2	13.4	8.1	5.4	7.1
Well with pump, tubewell	15.5	4.7	30.0	55.1	43.2
Well without hand pump	2.2	0.7	4.2	13.5	10.1
River, canal, karez	0.9	0.8	1.1	12.5	9.0
Tanker, vendor	0.3	0.3	0.2	0.5	0.4
Rainwater	--	--	--	0.9	0.6
Other	1.3	1.2	1.3	1.7	1.6
Missing	0.3	0.2	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0
Sanitation facility					
Flush	74.5	89.3	54.6	5.8	26.5
Bucket	14.4	6.2	25.4	10.0	11.3
Pit latrine	4.4	2.8	6.5	11.5	9.3
Other	0.7	0.5	0.9	0.1	0.3
No facilities	6.0	1.1	12.6	71.9	52.1
Missing	0.1	0.1	0.1	0.7	0.5
Total	100.0	100.0	100.0	100.0	100.0
Material of walls					
Baked bricks, cement	81.1	92.4	65.9	19.2	37.8
Unbaked bricks, mud	16.3	6.9	28.9	60.0	46.9
Wood/bamboo	2.3	0.6	4.7	15.7	11.6
Other	0.3	0.1	0.5	5.1	3.6
Total	100.0	100.0	100.0	100.0	100.0
Material of roof					
RCC/RBC	45.0	57.8	27.9	4.1	16.4
T-Iron/wood/brick	21.5	15.2	29.9	19.5	20.1
Asbestos/iron sheets	10.6	16.7	2.4	3.6	5.7
Wood/bamboo	22.8	10.2	39.6	72.2	57.3
Other	0.1	0.1	0.1	0.6	0.4
Total	100.0	100.0	100.0	100.0	100.0
Persons per sleeping room					
1-2	21.6	22.4	20.5	19.3	20.0
3-4	39.6	39.2	40.1	36.1	37.2
5-6	20.6	21.3	19.6	23.9	22.9
7 +	18.1	17.1	19.6	20.4	19.7
Missing/Don't know	0.1	0.1	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0
Mean	4.6	4.5	4.6	4.8	4.7
Number of households	1633	936	698	3796	5429

-- Less than 0.05 percent

3.6 Presence of Household Durable Goods

In order to obtain additional information on the socioeconomic status of households, household respondents were asked if specific household goods were present in their homes. Table 3.8 shows that 35 percent of all households in Pakistan have a radio and a little more than one-quarter (27 percent) have a television. As expected, both these items show large differentials between urban and rural areas, but the differential for televisions is particularly prominent.

Table 3.8 Household durable goods

Percentage of households possessing various durable consumer goods, by urban-rural residence, Pakistan 1990-91

Item	Total urban	Major city	Other urban	Rural	Total
Radio	51.9	58.4	43.2	28.3	35.4
Television	64.2	74.7	50.1	10.9	27.0
Refrigerator	37.6	46.3	26.0	4.0	14.1
Room cooler	13.2	13.0	13.5	1.2	4.8
Washing machine	43.4	50.2	34.2	2.9	15.1
Water pump	23.0	21.5	25.0	3.2	9.2
Bicycle	39.9	34.4	47.2	31.4	33.9
Motorcycle	17.6	21.4	12.5	3.3	7.6
Car, van or tractor	6.4	7.1	5.5	3.8	4.6
Number of households	1633	936	698	3796	5429

Refrigerators, room coolers, and washing machines are all concentrated in urban areas. Only a few households in rural areas reported owning any of these items. Bicycles are the most commonly owned means of transport in all areas. At the national level, 34 percent of all households own at least one bicycle. About 8 percent of all households have a motorcycle, but motorcycles are more common in major cities (21 percent). Less than five percent of households own a car, a van or a tractor.

3.7 Background Characteristics of Female Respondents

Women were eligible for the individual interview if they were ever married, age 15-49, and stayed in the household the night before the household interview was conducted. Eligible women were asked their age, marital status, educational level, place of residence, work status and physical mobility, in addition to many other questions on demographic and health status. Table 3.9 presents information on the background characteristics of all 6,611 eligible women who were interviewed. More than half of these women (57 percent) were in the 20-34 age group, with the largest number in age 25-29. The age distribution of currently married women in their childbearing years from four sources is compared in Figure 3.3. The PDHS age distribution is closest to the age distribution for the PCPS. The relatively low proportion of currently married women age 15-24 in the PDHS is consistent with the evidence that the average age of marriage in Pakistan has been rising over time.

A large majority of ever-married women (96 percent) were currently married and only a negligible proportion were either widowed, divorced or separated. About 80 percent of women had never attended school and only 7 percent were educated up to the secondary or higher levels. Almost 70 percent of women were residents of rural areas, 17 percent resided in major cities and the rest were located in other urban areas. A majority of respondents (60 percent) were from Punjab, 23 percent were from Sindh, 13 percent from NWFP and 4 percent from Balochistan.

The norm in Pakistan is for women to stay home and take care of the house and the children. It is not common for women to join the labor market and their mobility is often restricted. In the PDHS, only 17 percent of women were reported to be currently working at the time of the survey and an additional 4 percent had worked only before marriage. Three-quarters of all women stated that they had never worked. To gauge the extent of their physical mobility, women were asked whether they would need to be accompanied by someone if they needed to go to a hospital or clinic for medical treatment. While one-quarter of women reported that they could go to a hospital alone, 71 percent reported that they would need to be accompanied by someone. The restriction on their physical mobility can be explained partly by cultural norms. An alternative hypothesis is that women usually do not seek medical treatment for minor illnesses and they leave the house only when their illness has become serious. Under these circumstances, they would need to be accompanied to go to a hospital.

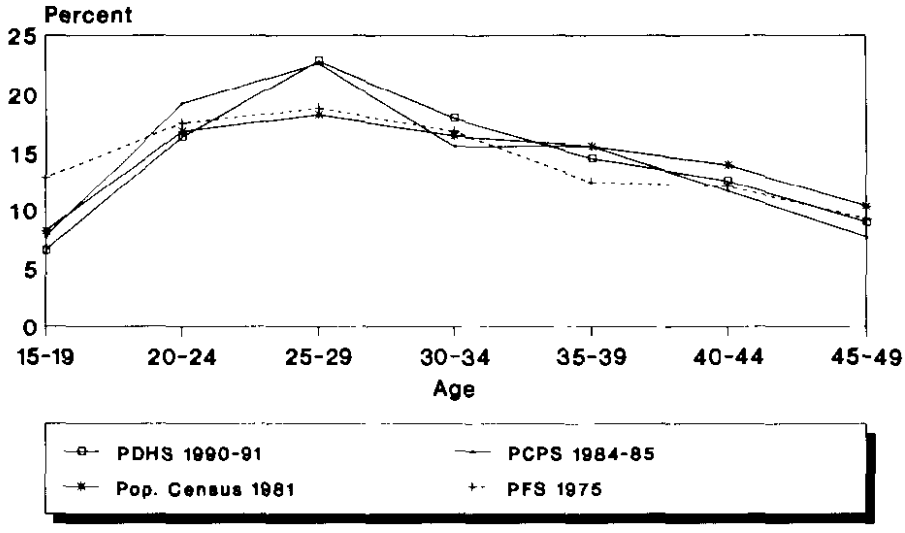
Table 3.9 Background characteristics of female respondents

Percent distribution of ever-married women by background characteristics, Pakistan 1990-91

Background characteristic	Weighted percent	Weighted number of women	Unweighted number of women
Age			
15-19	6.5	428	407
20-24	16.0	1059	1064
25-29	22.6	1494	1469
30-34	18.0	1187	1200
35-39	14.8	981	1031
40-44	12.8	844	820
45-49	9.3	617	620
Marital status			
Married	96.3	6364	6393
Widowed	2.4	159	148
Divorced	0.3	22	19
Separated	1.0	65	51
Residence			
Total urban	30.5	2019	3384
Major city	17.4	1151	1820
Other urban	13.1	868	1564
Rural	69.5	4592	3227
Province			
Punjab	59.7	3948	2207
Sindh	23.1	1529	1798
NWFP	13.3	878	1665
Balochistan	3.9	255	941
Education level attended			
No education	79.2	5237	5055
Primary	9.1	601	600
Middle	4.4	288	320
Secondary	6.2	410	522
Higher	1.1	75	114
Work status			
Currently working	16.8	1111	1057
Worked only before marriage	4.4	290	292
Worked only after marriage	0.7	44	52
Worked before and after marriage	1.1	72	74
Never worked[1]	76.7	5073	5111
Missing	0.3	21	25
Mobility			
Could go to hospital alone	25.1	1660	1699
Would need to be accompanied	70.8	4682	4441
Depends or missing	4.1	269	471
Total	100.0	6611	6611

[1]"Never worked" means that the woman is not currently working and she did not work either before marriage or just after marriage.

Figure 3.3
Distribution of Currently Married Women by Age, Pakistan, 1975-1991



Source: Population Welfare Division (1986)

In Table 3.10, variations in the level of education by age group, place and province of residence, and work status are examined. In all age groups, no less than three-quarters of women reported that they had never attended school. In general, younger women were more likely to have attended school than older women. A comparison of educational attainment as measured by the 1975 PFS and the PDHS confirms that levels of educational achievement for women have been increasing over time.

Even among women residing in major cities, 48 percent had no education and only one-quarter had attended a secondary school or a higher level of education. At the other extreme, 90 percent of women from rural areas had no education and only 1 percent had attended secondary school. The provincial educational pattern follows the general pattern of development. Punjab and Sindh, which are more developed, have a lower percentage of women who had no education and 8-9 percent had attended secondary school or gone beyond secondary school. In Balochistan, 96 percent of women had no education and only 1 percent had reached secondary school.

Women who were currently working were the least educated group. Eighty-four percent of working women had never been to school and only seven percent had some secondary or higher education. The highest average level of education was exhibited by those who worked only before marriage or both before and after marriage. Those who worked just after marriage also had a relatively high level of education: 13 percent reported that they had attended secondary school or a higher level of education.

Table 3.10 Level of education

Percent distribution of ever-married women by the highest level of education attended, according to selected background characteristics, Pakistan 1990-91

Background characteristic	No education	Primary	Middle	Secondary	Higher	Total	Number
Age							
15-19	81.0	10.9	3.6	4.2	0.2	100.0	428
20-24	75.3	12.6	5.1	5.9	1.0	100.0	1059
25-29	75.7	8.7	5.6	8.8	1.1	100.0	1494
30-34	77.7	9.2	4.0	7.5	1.6	100.0	1187
35-39	79.8	8.8	4.2	5.8	1.4	100.0	981
40-44	84.0	7.2	3.4	4.3	1.1	100.0	844
45-49	88.5	5.4	2.7	2.5	0.8	100.0	617
Residence							
Total urban	55.0	14.8	9.1	17.5	3.6	100.0	2019
Major city	47.7	15.7	10.6	20.7	5.3	100.0	1151
Other urban	64.6	13.6	7.1	13.3	1.5	100.0	868
Rural	89.9	6.6	2.3	1.2	--	100.0	4592
Province							
Punjab	76.5	10.3	5.2	6.7	1.3	100.0	3948
Sindh	76.8	10.2	3.8	7.9	1.3	100.0	1529
NWFP	90.6	4.0	2.4	2.7	0.3	100.0	878
Balochistan	96.3	1.9	0.6	1.0	0.2	100.0	255
Work status[1]							
Currently working	84.3	5.8	3.0	5.1	1.8	100.0	1111
Worked only before marriage	64.2	11.6	6.3	13.5	4.4	100.0	290
Worked only after marriage	74.0	9.1	3.8	12.4	0.6	100.0	44
Worked before & after marriage	63.9	15.1	4.8	7.1	9.1	100.0	72
Never worked[2]	79.2	9.6	4.6	6.0	0.7	100.0	5073
Total	79.2	9.1	4.4	6.2	1.1	100.0	6611

-- Less than 0.05 percent

[1]Excludes 21 women with missing information on work status.

[2]"Never worked" means that the woman is not currently working and she did not work either before marriage or just after marriage.

3.8 Exposure to Mass Media

As an indicator of exposure to mass media, each woman interviewed was asked whether she usually reads a newspaper, watches television, or listens to radio at least once a week. Table 3.11 shows that 14 percent of women read a newspaper weekly, 30 percent watch TV and 27 percent listen to radio.

As expected, there is a close association between the level of education and exposure to the three types of media. The low level of exposure to radio and TV among uneducated women may be explained by their lack of access to these facilities. There is also a large differential in media exposure between urban and

rural women. Women in major cities are more likely to watch TV (78 percent) than to read newspapers (43 percent) or listen to the radio (47 percent). In contrast, rural women listen to radio (21 percent) more than they watch TV (13 percent) or read newspapers (5 percent). Women from small cities or towns follow a pattern similar to women from major cities, however exposure to all forms of media is the highest in major cities.

Women in Sindh are more exposed to all types of media than women in other provinces. Women in Punjab have a pattern of media exposure similar to the national pattern. More than four times as many women in NWFP are exposed to radio and TV as are exposed to newspapers, while Balochi women are most often exposed to radio. In general, Balochi women have the least access to these media, perhaps because of a lack of media facilities in Balochistan and because of the large geographical area over which the population is dispersed.

Table 3.11 Exposure to mass media

Percentage of ever-married women who usually read a newspaper, watch television, or listen to radio at least once a week by selected background characteristics, Pakistan 1990-91

Background characteristic	Read newspaper weekly	Watch TV weekly	Listen to radio weekly	Number of women
Age				
15-19	11.0	24.8	31.8	428
20-24	14.9	28.8	30.3	1059
25-29	17.3	30.2	29.3	1494
30-34	14.7	30.5	26.5	1187
35-39	14.8	31.7	26.6	981
40-44	10.1	30.6	22.0	844
45-49	8.7	28.9	21.9	617
Residence				
Total urban	34.1	67.5	41.1	2019
Major city	42.6	77.9	46.5	1151
Other urban	22.7	53.6	34.0	868
Rural	5.1	13.3	20.9	4592
Province				
Punjab	14.4	29.1	26.3	3948
Sindh	19.6	40.2	33.1	1529
NWFP	5.4	21.5	23.8	878
Balochistan	2.8	7.3	15.0	255
Education level attended				
No education	1.8	18.8	21.5	5237
Primary	43.1	57.8	43.1	601
Middle	65.9	70.4	50.4	288
Secondary	75.8	88.0	53.1	410
Higher	93.8	99.5	59.4	75
Total	13.9	29.8	27.1	6611

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CHAPTER 4

FERTILITY

Fred Arnold and Mehboob Sultan

One of the major objectives of the PDHS is to estimate fertility levels, trends and differentials. Information on fertility will help to determine the impact of changes in the use of family planning and other changes in the proximate determinants of fertility. The fertility estimates presented in this chapter are based on the reported birth histories of ever-married women 15-49 years old who were interviewed in the PDHS. Respondents were first asked to report the aggregate number of sons and daughters they had ever given birth to in their lifetime. To encourage complete reporting, women were asked separately about children still living at home, those living elsewhere and children who had died. The birth history also obtained information on the sex, date of birth and survival status of each child. This information was used to calculate measures of current fertility and fertility trends over time, as well as cumulative measures of the number of children ever born. In addition, estimates of birth intervals and the mother's age at the initiation of childbearing were calculated from data on the timing of births.

To obtain complete and accurate information on reproduction, interviewers were trained to probe carefully to facilitate the respondent's recall and to check any documents that may include birth dates for children. Moreover, for any intervals of more than three years between births, interviewers were required to record the reason for the long interval to help identify any live births that may have been missed during that time period.

In spite of the precautions taken, the PDHS is subject to the same types of errors that are typical of all retrospective demographic surveys. These include the underreporting of births (particularly for children who died immediately after birth or at a very early age) and the mistiming of births. These types of problems are particularly prevalent in countries such as Pakistan where the level of female literacy is low. In previous demographic surveys in Pakistan, births have been misplaced away from the survey date because of a pattern of exaggerating children's ages that increases with age (Retherford, et al. 1987). A further complication in the PDHS is the displacement of births out of the most recent five-year period (from 1986 to the time of the survey). This has been a significant problem in many DHS surveys in other countries (Arnold 1990). The apparent reason for this type of displacement is that interviewers were trying to avoid a lengthy set of questions on health that were asked only about children born since January 1986. Because of the needs of policy makers for more detailed health data, the health section has been lengthened in recent DHS surveys and the displacement problem persists. Moreover, since height, weight and arm circumference measurements were also taken only on living children born in 1986 or later, there is an even stronger incentive for moving the dates of children's births out of that time period. In the PDHS, displacement was a serious problem, with nearly twice as many births being reported in 1985 as in 1986 (see Appendix C, Table C.4). For this reason, fertility and mortality rates in this report are presented for six-year periods, so that the transference of most displaced births will occur within a single time period rather than across time period boundaries.

The omission of recent births has been a feature of all retrospective demographic surveys in Pakistan. This problem is often attributed to inaccurate reporting by respondents. In the PDHS, the omission of recent births may be compounded by the underenumeration of births by interviewers who are trying to circumvent the health questions and to avoid weighing and measuring young children. The decline in the average annual number of births from 1556 in 1982-85 to 1145 in 1986-90 (Appendix C, Table C.4) is undoubtedly due in part to the omission of children born in the five years before the survey.

It is difficult, however, to correct the fertility estimates for the incomplete reporting of births since some of the estimated fertility decline is a real phenomenon and an unknown portion is attributable to data errors.

4.1 Fertility Levels and Trends

Until recently, fertility rates in Pakistan have remained high with little evidence of a sustained fertility decline (Shah and Cleland 1988; Rukanuddin and Farooqui 1988; Shah, Pullum and Irfan 1986; Retherford and Alam 1985). In recent years, however, fertility has begun to decline in response to a rapidly increasing age at marriage and a rise in the prevalence of contraceptive use. Various summary measures of fertility have been calculated from the PDHS to provide a complete picture of recent fertility, including the crude birth rate (CBR), the general fertility rate (GFR), age-specific fertility rates (ASFR) and the total fertility rate (TFR). These estimates are described in the following sections.

Crude Birth Rate

The crude birth rate (per thousand population) is the least sophisticated measure of fertility, but it is the most commonly used and easily understood. Several attempts have been made to estimate the CBR in Pakistan, but there is still no agreement on its precise magnitude. In the PDHS, the CBR is calculated by summing the product of the age-specific fertility rates and the proportion of women in each age group out of the total de facto (male and female) population at all ages. Since the ASFRs relate to births during the past six years, the CBR calculated from the PDHS pertains to the same period and is centered on the years 1987-88.

Table 4.1 shows the crude birth rates for selected years derived from various surveys. The PDHS estimates a CBR of 35 per thousand population. The CBRs estimated from previous surveys are 39 for the 1968-69 National Impact Survey (NIS), 41 for the 1975 Pakistan Fertility Survey (PFS), and 37 for the 1984-85 Pakistan Contraceptive Prevalence Survey (PCPS). The Pakistan Demographic Survey (PDS) estimated a CBR of 43 for each year during the period 1984-87 and 40 for 1988. The PDS rates are, however, based on indirect measures involving the matching of vital events and are considered to be on the high side.

The CBRs by residence indicate that fertility is slightly higher in rural areas (36) than urban areas (34). The provincial differentials are also worth noting. The lowest CBR is observed for Sindh (33) and the highest for Balochistan (38). Karachi had a slightly higher CBR (36) than major cities as a whole (34). This may be due to an age-sex distribution which favours higher fertility or the somewhat lower level of contraceptive prevalence in Karachi than in other major cities.

Comparing the CBRs from the 1984-85 PCPS and the 1990-91 PDHS, it is observed that there was a small decline of four percent in the CBR between the two surveys. The CBR declined in each type of place of residence and each province, except for major cities and for Sindh where it exhibited a slight increase.

It should be noted that the CBRs obtained from various sources are the by-products of methodological procedures, response errors, enumerator biases, problems of coverage and sampling errors, which may be of different nature and magnitude in different surveys. However, it appears that the fertility transition at least started in Pakistan after the mid-1970s.

Table 4.1 Crude birth rates according to selected surveys

Crude birth rate per thousand for selected surveys 1968-1991, Pakistan

Urban-rural residence and province	1990-91 PDHS	1984-85 PCPS	1975 PFS	1968-69 NIS
Residence				
Total urban	33.7	U	U	U
Major city	33.5	32.6	U	U
Other urban	34.0	38.5	U	U
Rural	35.6	37.1	U	U
Province				
Punjab	35.5	37.6	U	U
Sindh	32.8	32.0	U	U
Karachi	36.2	U	U	U
NWFP	35.3	36.4	U	U
Balochistan	38.3	45.4	U	U
Total	35.0	36.6	40.5	39

Note: The period covered by the CBR estimates is six years prior to the interview for the PDHS and one year prior to the interview for the other three surveys. The estimated crude birth rate from the PDHS for one year prior to the survey is 34.2.
U = Unknown; no information
Source: Population Planning Council of Pakistan (1976), Population Welfare Divison (1986)

General Fertility Rate

The general fertility rate (GFR) is calculated by dividing the number of births occurring during a specific period of time by the number of women of reproductive age (15-49 years of age) and multiplying the result by 1,000. The PDHS estimated the GFR to be 177 for the country as a whole—that is, 177 births to every 1,000 women (see Table 4.2). The observed GFR is higher in rural areas (184) than urban areas (163). Within urban areas, the GFR is lower in major cities (157) than in other urban areas (170). The highest GFR is observed in Balochistan (201), followed by Punjab and NWFP (178 each) and Sindh (171). The GFR for Pakistan was almost the same in the PDHS and the PCPS with an increase in urban rates and a slight decrease in rural rates between the two surveys.

Table 4.2 Current fertility

Age-specific and cumulative fertility rates and the crude birth rate for the six years preceding the survey, by urban-rural residence and province and for Karachi, Pakistan, 1990-91

Age	Residence				Province					Total
	Total urban	Major city	Other urban	Rural	Punjab	Sindh	NWFP	Balochistan	Karachi	
15-19	59	55	64	97	79	88	86	149	70	84
20-24	224	225	222	235	226	235	227	267	241	230
25-29	268	259	281	268	275	242	287	251	272	268
30-34	225	211	243	231	237	211	233	190	213	229
35-39	126	116	141	157	159	118	149	116	119	147
40-44	[49]	[47]	[53]	[85]	[70]	[79]	[77]	[82] [a]	[63] [a]	[73]
45-49	[29]	[21] [a]	[38] [a]	[44]	[30] [a]	[51] [a]	[41] [a]	b	b	[40]
TFR 15-49	4.90	4.67	5.21	5.58	5.39	5.12	5.50	5.84	5.03	5.36
TFR 15-44	4.86	4.56	5.02	5.36	5.24	4.86	5.30	5.28	4.89	5.16
GFR	162.5	157.0	170.4	184.1	178.0	170.7	177.8	201.1	173.5	177.0
CBR	33.7	33.5	34.0	35.6	35.5	32.8	35.3	38.3	36.2	35.0

Note: Rates are calculated for all women 15-49, using information on women's age and marital status from the household questionnaire and on the number of births from the woman's questionnaire. Figures in brackets are partially truncated rates.
[a]Based on fewer than 500 person-months of exposure
[b]Based on fewer than 250 person-months of exposure, rates not shown
TFR: Total fertility rate expressed per woman
GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population

Age-Specific and Total Fertility Rates

Although the GFR is a more refined measure than the CBR, both are crude summary measures. The changes observed in these rates may not provide a complete picture; better estimates of fertility can be obtained by examining the age-specific fertility rates (ASFRs) and the total fertility rate (TFR).

A historical series of fertility estimates from four national surveys is shown in Table 4.3. The total fertility rate (TFR) is a summary measure that indicates the number of children a woman would bear during her reproductive years if she were to experience the age-specific fertility rates prevailing at the time of the survey. Mathematically, the TFR is five times the sum of the age-specific fertility rates for each five-year age group. The Pakistan Contraceptive Prevalence Survey (PCPS) includes only currently married women in its sample, whereas the other three surveys interviewed ever-married women. In order to calculate the fertility rates for all women, it is assumed that no births occur outside of marriage.

Table 4.3 Current fertility according to selected surveys

Age-specific fertility rates for selected surveys 1975-1991, Pakistan

Age group	1990-91 PDHS	1984-85 PCPS	1979-80 PLM	1975 PFS
15-19	84	64	99	131
20-24	230	223	283	275
25-29	268	263	313	315
30-34	229	234	263	259
35-39	147	209	188	188
40-44	73	127	101	77
45-49	40	71	48	11
Total fertility rate, 15-49	5.4	6.0	6.5	6.3

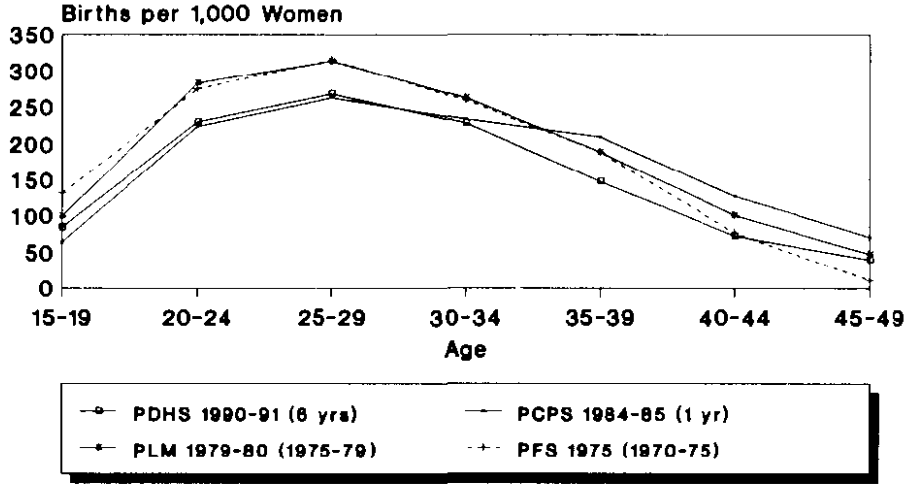
Source: Alam, Irfan and Farooqui [1984] and Population Welfare Division (1986)

According to the Pakistan Fertility Survey (PFS) and the Population, Labour Force and Migration Survey (PLM), the total fertility rate in the 1970s was between 6.3 and 6.5 children per woman. The PCPS recorded a drop to 6.0 children per woman and the PDHS registered a further decline to 5.4 children per woman (a decline of 10 percent since the 1984-85 PCPS and 15 percent since the 1975 PFS).[1] According to the PDHS, if current age-specific fertility rates were to remain unchanged in the future, the average woman in Pakistan would have 1.6 children by the time she reaches age 25, 2.9 children by age 30, more than four children by her thirty-fifth birthday, and 5.4 children by the end of her childbearing years.

Trends in age-specific fertility rates are somewhat erratic, although fertility is generally lower in the two most recent surveys (see Table 4.3 and Figure 4.1). A comparison of the fertility estimates from the PFS and the PDHS shows that fertility declined most rapidly (by more than one-third) in the 15-19 age group, reflecting a pattern which is consistent with the increasing age at marriage. Substantial fertility declines are also evident at ages 20-39.

[1]It should be noted, however, that the average TFR estimated by the Pakistan Demographic Survey for 1984-1988 (6.9 children per woman) would suggest that fertility has not yet begun to decline in Pakistan (Federal Bureau of Statistics 1990).

Figure 4.1
Age-Specific Fertility Rates
Pakistan, 1970-1991



Source: Alam, Irfan and Farooqui [1984]; Population Welfare Division (1986)

Differentials in fertility by type of place of residence are shown in Table 4.4 and Figure 4.2. Overall, urban areas have lower fertility rates than rural areas and within urban areas major cities have lower fertility. Fertility rates in urban and rural areas were very similar during the prime childbearing years (ages 20-34), but differences in urban and rural fertility levels are striking in the youngest and oldest age groups (see Table 4.2). Overall, at current fertility rates, the average woman living in a large city can be expected to have nearly one child less than her rural counterpart (4.7 children compared to 5.6 children).

Provincial differences in fertility are quite modest. The TFR for women age 15-49 ranges from 5.1 in Sindh to 5.8 in Balochistan. For women age 15-44, the range of fertility estimates is even more restricted. At the provincial level, it is preferable to compare the estimates of fertility at ages 15-44 rather than 15-49 since the age-specific fertility rates at age 45-49 are based on only a small number of years of exposure to the risk of pregnancy. An additional reason for focusing on the 15-44 age group is that the TFR which includes women age 45-49 uses data which are progressively truncated as one moves back in time.

A separate estimate of fertility is shown for Karachi, which has a total fertility rate of 5.0 for women age 15-49 and 4.9 for women age 15-44. While Karachi's fertility is lower than the national average, it is somewhat higher than the fertility reported for other major cities in Pakistan. As noted earlier, this finding is consistent with the fact that the reported contraceptive prevalence rate for Karachi is lower than that reported for other major cities.

Current fertility rates are related not only to the geographical area in which a woman resides but also to her educational attainment. Women without any formal education have a TFR that is nearly one child higher than women who have attended primary school and two children higher than women who have gone beyond the middle school level (see Table 4.4).

Table 4.4 also shows the mean number of children ever born to women age 40-49—that is, women who are approaching the end of their childbearing years. A comparison of this cumulative measure of childbearing with the TFR gives a rough indication of the trend in fertility over the last several decades. For all women, the total fertility rate is exactly one child less than the mean number of children ever born. This difference provides further evidence that fertility has started to decline in Pakistan, although if there are errors in recording recent births in the birth history, the decline may not be as rapid as the comparison suggests. The differences between the two measures are greatest for women in Sindh and Punjab as well as for those living in urban areas (particularly in Karachi and other major cities). Therefore, women in these areas appear to be leading the way in the early stages of the fertility decline. Educational attainment is strongly related to both cumulative and current fertility levels, suggesting that educated women have been experiencing lower fertility for a long period of time.

Table 4.4 Fertility by background characteristics

Total fertility rate for the six years preceding the survey, and mean number of children ever born (CEB) to women 40-49 years of age, by selected background characteristics, Pakistan 1990-91

Background characteristic	Total fertility rate	Mean no. of CEB (women 40-49)
Residence		
Total urban	4.9	6.3
Major city	4.7	6.3
Other urban	5.2	6.4
Rural	5.6	6.4
Province		
Punjab	5.4	6.3
Sindh	5.1	6.6
Karachi	5.0	7.1
NWFP	5.5	6.1
Balochistan	5.8	5.7
Education level attended		
No education	5.7	6.5
Primary	4.9	6.1
Middle	4.5	5.3
Secondary+	3.6	4.3
Total	5.4	6.4

Note: Figures are calculated for all women 15-49, using information on women's age and marital status from the household questionnaire and on the number of births from the woman's questionnaire.

The most direct way of observing fertility trends is to examine changes in age-specific fertility rates over time based on the PDHS birth history data (see Table 4.5). The trend in fertility over a period of more than two decades can be seen for women age 15-34. Only partial information is available for older women because of truncation in the data for earlier time periods. The lowest estimated fertility rate in every age group is observed for the most recent six-year period. A comparison of the two most recent periods reveals that estimated fertility has fallen most rapidly (by over forty percent) in the youngest and oldest age groups. Fertility also reportedly declined by more than one-quarter in every other age group. Declines of the magnitude shown for the middle and older age groups seem unlikely given the continuing low level of contraceptive prevalence in Pakistan. The fertility decline in these age groups is probably exaggerated by errors in the coverage and timing of births in the PDHS. This conclusion seems particularly warranted in light of the experience of previous demographic surveys in Pakistan. In evaluating the quality of three large-scale national demographic surveys and the 1981 census, Retherford et al. (1987) noted that the estimated TFR fell below five children per woman during the two years preceding each of the surveys. However, there was no credible evidence that fertility had actually fallen during any of these periods. The authors concluded that fertility was severely underestimated in the five-year period preceding each survey.

Figure 4.2
Total Fertility Rate (TFR) and Mean Number of Children Ever Born (CEB)

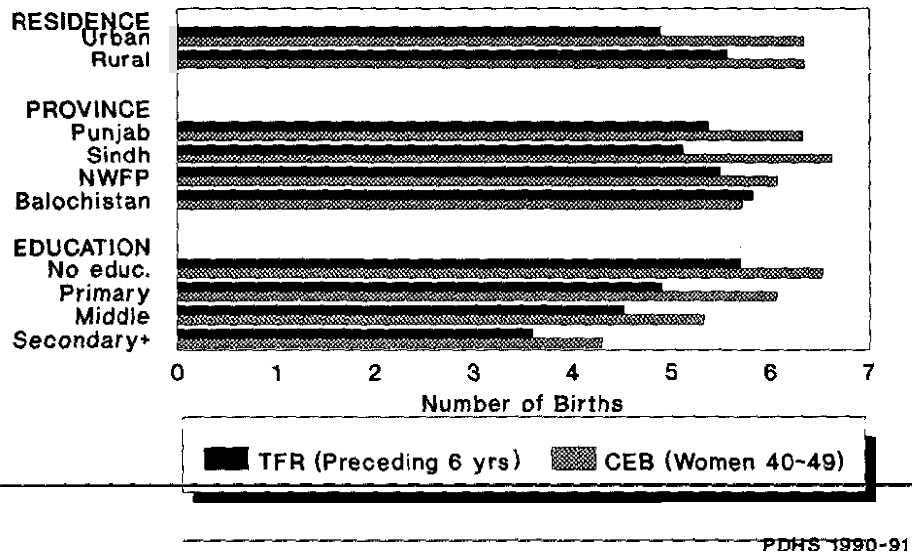


Table 4.5 Fertility trends

Age-specific fertility rates for six-year periods preceding the survey, by mother's age at the time of birth, Pakistan 1990-91

Mother's age	Number of years preceding survey 0-5	6-11	12-17	18-23
~~15-19~~	~~84~~	~~145~~	~~189~~	~~116~~
20-24	230	317	294	278
~~25-29~~	~~268~~	~~367~~	~~331~~	~~[334]~~
30-34	229	319	[309]	a
35-39	~~147~~	~~[212]~~	~~[227]~~[b]	~~U~~
40-44	[73]	[137]	U	U
~~45-49~~	~~[40]~~	~~U~~	~~U~~	~~U~~

Note: Age-specific fertility rates are per 1,000 women. Figures in brackets are partially truncated rates.

~~U = Unknown, no information~~

[a]Based on fewer than 250 person-months of exposure, rates not shown

[b]Based on fewer than 500 person-months of exposure

Table 4.5 also shows that fertility registered modest gains in the two earliest intervals between six-year periods. Fertility may have actually risen over that time period but possible data errors again need to be considered in interpreting the results. The apparent rise in fertility in the earlier periods may be due to a commonly observed tendency among older women to underreport early births or to displace the birth dates of those children forward in time (Potter 1977).

The pattern of fertility change over time discussed above is also evident for women with marital durations of less than 10 years, but estimated fertility has fallen steadily over time for women married more than 15 years (see Table 4.6). In the most recent six-year period, the estimated fertility rate declines consistently as the duration of marriage increases. Women who have been married for more than 15 years reported sharply lower fertility than women with shorter marriage durations.

Table 4.6 Fertility by marital duration

Fertility rates for ever-married women by duration since first marriage in years for six-year periods preceding the survey, Pakistan 1990-91

Marriage duration at birth	Number of years preceding survey			
	0-5	6-11	12-17	18-23
0-4	339	386	343	309
5-9	298	412	381	379
10-14	248	346	325	341
15-19	186	263	286	a
20-24	98	187	a	a
25-29	52	(95)	a	NA

Note: Rates in parentheses are based on fewer than 500 person-months of exposure.
NA = Not applicable
[a]Based on fewer than 250 person-months of exposure, rates not shown

4.2 Children Ever Born

The cumulative number of children ever born is shown in Table 4.7 for all women and for currently married women. The figures for all women are calculated by assuming that all births occur within marriage. Women in their childbearing years in Pakistan have had an average of three children and currently married women have had an average of just over four children. The steady increase in the average number of children ever born by age is a normal function of the family building process. Women who are currently at the end of their childbearing years have had, on average, more than six births. Mortality has had a significant impact on family size, however, since the average woman age 40-49 has had one child who died by the time of the survey. Taking the difference between the mean number of children ever born (6.6) and the mean number of children surviving (5.6), it is seen that, overall, there has been a loss of 15 percent of births among currently married women age 40-49.

Early childbearing is relatively rare in Pakistan. Only 12 percent of women in the 15-19 age group have ever had a child and even in the 20-24 age group only a minority of women have ever given birth. Eventually, however, nearly all women bear children. Among currently married women age 35-49,

only three percent have never had a child. This low level of childlessness indicates that primary sterility is low in Pakistan. This is consistent with the findings of a low level of primary sterility in the 25 DHS surveys carried out from 1986 to 1989 (Arnold and Blanc 1990).

Table 4.7 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born (CEB) and mean number of children ever born and living, according to age group, Pakistan 1990-91

	Number of children ever born														
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean no. of CEB	Mean no. of living children
								ALL WOMEN							
15-19	87.8	9.2	1.9	1.0	0.1	--	--	--	--	--	--	100.0	1720	0.2	0.1
20-24	54.3	17.0	15.3	8.2	3.6	0.9	0.6	0.1	--	--	--	100.0	1747	1.0	0.8
25-29	23.0	10.4	15.0	17.4	15.3	11.0	4.6	2.3	0.8	0.2	0.1	100.0	1745	2.6	2.3
30-34	9.2	5.0	8.8	14.8	16.7	13.6	12.7	9.4	5.1	2.9	1.9	100.0	1241	4.3	3.7
35-39	5.4	3.4	4.3	8.6	10.2	16.8	16.9	12.9	8.8	6.2	6.4	100.0	1005	5.5	4.8
40-44	5.5	1.5	3.0	7.3	9.0	12.0	13.2	15.4	11.5	7.1	14.6	100.0	865	6.3	5.4
45-49	5.5	2.7	3.3	7.7	5.8	10.5	13.4	11.4	13.8	10.0	15.8	100.0	630	6.4	5.5
Total	34.7	8.5	8.5	9.4	8.4	8.0	6.9	5.5	3.9	2.5	3.5	100.0	8953	3.0	2.6
								CURRENTLY MARRIED WOMEN							
15-19	51.4	36.8	7.5	4.0	0.2	--	--	--	--	--	--	100.0	418	0.6	0.6
20-24	24.3	27.9	25.2	13.7	6.1	1.6	1.1	0.1	--	--	--	100.0	1041	1.6	1.4
25-29	9.5	11.8	17.2	20.5	18.2	13.2	5.5	2.7	0.9	0.2	0.2	100.0	1452	3.1	2.7
30-34	4.7	4.6	8.7	15.4	17.8	14.5	13.7	10.0	5.4	3.1	2.1	100.0	1147	4.6	4.0
35-39	2.7	3.3	4.6	9.0	8.9	17.5	17.7	13.5	9.4	6.6	6.8	100.0	932	5.7	5.0
40-44	3.1	1.1	3.1	7.3	8.9	11.7	13.5	16.4	12.3	7.1	15.5	100.0	803	6.5	5.6
45-49	3.8	2.8	3.5	7.4	6.1	10.1	13.7	11.4	14.5	10.4	16.4	100.0	572	6.6	5.6
Total	11.5	11.4	11.5	12.8	11.4	10.8	9.4	7.5	5.4	3.4	4.8	100.0	6364	4.1	3.5

-- Less than 0.05 percent

Although currently married women age 45-49, on average, have had 6.6 children, the range of family sizes is quite wide. Ten percent have had fewer than three children and an additional 13 percent have had three or four children. About one-quarter (24 percent) have had five or six children and another quarter (26 percent) have had seven or eight children. At the high end of the spectrum, more than one in four women have had nine or more live births and one in six women have had 10 or more births. More than half of currently married women age 45-49 have had at least seven live births.

Cumulative fertility for currently married women has shown some signs of a decline over time in every age group except age 15-19 (see Table 4.8). Although the overall mean number of children ever born was identical in the 1975 Pakistan Fertility Survey and the 1984-85 Pakistan Contraceptive Prevalence Survey, the mean number of children ever born declined slightly during that period in the

majority of age groups. Between the 1984-85 PCPS and the 1990-91 PDHS, the overall mean number of children ever born declined from 4.3 to 4.1. Because of a decline in mortality during that period, however, the mean number of surviving children remained constant at 3.5 children per woman. In fact, the mean number of surviving children actually increased from 3.2 to 3.5 between the time of the 1975 PFS and the 1984-85 PCPS, again due to a decline in mortality between the two surveys rather than to an increase in the cumulative number of children ever born.

Table 4.8 Children ever born according to selected surveys

Mean number of children ever born and children still living for currently married women, by age group, selected surveys 1975-1991, Pakistan

Age	Mean number of children ever born			Mean number of living children		
	1990-91 PDHS	1984-85 PCPS	1975 PFS	1990-91 PDHS	1984-85 PCPS	1975 PFS
15-19	0.6	0.6	0.6[a]	0.6	0.6	0.5[a]
20-24	1.6	1.8	1.9	1.4	1.5	1.5
25-29	3.1	3.4	3.4	2.7	2.8	2.8
30-34	4.6	5.0	5.2	4.0	4.2	4.0
35-39	5.7	6.1	6.4	5.0	5.1	4.9
40-44	6.5	7.0	7.5	5.6	5.5	5.2
45-49	6.6	7.5	7.4	5.6	5.7	5.1
15-49	4.1	4.3	4.3[a]	3.5	3.5	3.2[a]

[a] Includes currently married women age 10-14

Source: Population Welfare Division (1986) and Population Planning Council of Pakistan (1976)

Differentials in cumulative fertility by selected socioeconomic characteristics of respondents and their husbands are shown in Table 4.9. The largest differentials are observed for the woman's educational attainment. Women with some secondary school education or higher have 1.4 fewer children, on average, than women with no education. For the oldest age group (age 35 or higher) this differential widens to more than two children per woman. Differentials in fertility are less pronounced for the husband's education, particularly for men whose wives are in the youngest age groups. Women whose husbands are in professional, technical, clerical or service jobs have a relatively small number of children ever born. It is surprising, however, that the woman's own work experience is only weakly related to her cumulative fertility.

Table 4.9 Mean number of children ever born

Mean number of children ever born by background characteristics of currently married women and their husbands according to age, Pakistan 1990-91

Background characteristic	Age of woman 15-24	25-34	35+	Total
Woman's education				
No education	1.3	3.9	6.4	4.3
Primary	1.5	3.7	6.0	3.7
Middle	1.1	3.7	5.3	3.5
Secondary+	1.0	2.8	4.2	2.9
Woman's work status[1]				
Currently working	1.5	4.0	6.3	4.4
Worked previously	1.5	3.5	6.1	3.8
Never worked	1.3	3.7	6.2	4.0
Husband's education				
No education	1.3	4.0	6.4	4.4
Primary	1.4	3.7	6.5	4.1
Middle	1.3	3.6	6.7	3.7
Secondary+	1.3	3.4	5.3	3.6
Husband's occupation				
Professional, technical	1.5	3.1	5.8	3.7
Administrative, managerial	1.5	3.4	5.1	4.1
Clerical	1.3	3.3	5.8	3.7
Sales	1.3	4.1	6.1	4.3
Service	1.2	3.4	5.6	3.3
Agriculture, fishing	1.3	3.8	6.3	4.3
Production, transportation, labor	1.4	3.8	6.4	4.1
Not classifiable	1.0	3.7	6.1	3.9
Total	1.3	3.7	6.2	4.1

[1]"Worked previously" means that the woman is not curently working and she worked before marriage and/or just after marriage. "Never worked" means that the woman is not currently working and she did not work either before marriage or just after marriage.

4.3 Birth Intervals

Previous research has demonstrated that children born too close to the time of a previous birth are at increased risk of dying. The risk is particularly high when the interval between births is less than 24 months. Previous birth intervals for children born in the five years preceding the survey are shown in Table 4.10. The median interval since the previous birth is 29 months. One of every three births occurred less than 24 months after the previous birth and half of those had very short birth intervals of less than 18 months. Another one-third of births (36 percent) had previous birth intervals of two years and the remaining one-third (31 percent) had intervals of three years or more.

Table 4.10 Birth intervals

Percent distribution of births in the five years preceding the survey by number of months since previous birth, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Number of months since previous birth					Total	Median months since previous birth	Number of births
	7-17	18-23	24-35	36-47	48+			
Age								
15-19	32.4	21.0	39.6	6.7	0.3	100.0	23.7	68
20-29	19.8	18.7	37.0	12.6	11.9	100.0	26.8	2452
30-39	14.3	15.9	35.7	14.4	19.8	100.0	30.8	2242
40+	10.3	10.9	27.8	15.7	35.4	100.0	37.9	547
Birth order								
2-3	20.2	16.7	36.6	12.5	14.0	100.0	27.4	2056
4-6	13.6	16.4	37.0	13.8	19.2	100.0	30.0	2085
7+	16.0	17.3	31.1	14.9	20.7	100.0	30.4	1169
Sex of prior birth								
Male	17.7	16.2	33.3	14.8	18.0	100.0	29.1	2702
Female	15.6	17.3	37.9	12.3	16.9	100.0	29.0	2608
Survival of prior birth								
Living	14.7	16.3	36.6	13.9	18.7	100.0	30.0	4670
Dead	31.2	20.2	28.5	11.1	9.0	100.0	23.7	640
Residence								
Total urban	20.6	19.5	33.0	12.6	14.2	100.0	26.5	1649
Major city	21.9	20.6	31.9	12.1	13.6	100.0	25.7	938
Other urban	19.0	18.0	34.5	13.4	15.1	100.0	27.7	712
Rural	14.9	15.5	36.7	14.0	19.0	100.0	30.3	3660
Province								
Punjab	16.3	16.3	38.4	13.2	15.8	100.0	28.9	3238
Sindh	19.9	18.1	26.8	11.4	23.9	100.0	28.3	1158
NWFP	11.5	17.3	37.2	17.2	16.9	100.0	31.3	709
Balochistan	22.5	13.7	34.3	18.8	10.7	100.0	27.3	205
Education level attended								
No education	15.0	16.4	36.3	14.0	18.4	100.0	29.8	4192
Primary	22.2	20.2	32.3	12.9	12.5	100.0	26.2	524
Middle	26.3	14.2	39.3	7.7	12.5	100.0	25.9	233
Secondary+	22.6	17.1	29.5	13.9	17.0	100.0	27.5	361
Total	16.7	16.7	35.6	13.6	17.5	100.0	29.1	5310

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

The median birth interval is relatively short for younger women, for urban residents, for women living in Balochistan and for women who had received some formal education. In Balochistan, birth intervals are relatively short for both modern (urban, educated) women and traditional women. This

finding is probably due to a complex set of circumstances including negligible contraceptive use in Balochistan and a later age at marriage and shorter breastfeeding among modern women. Birth intervals are also shorter than average for second and third order births. Second and third order births were also most likely to be in the high risk group—that is, births occurring within 24 months of the preceding birth. As expected, children whose prior sibling had died before the time of the survey had the shortest previous birth intervals. A majority of children whose prior sibling had died were born less than 24 months after the birth of the previous child.

4.4 Age at First Birth

The age at which a woman bears her first child has important demographic and health consequences. On the demographic side, early initiation into childbearing is generally a major determinant of large family size and rapid population growth, particularly in countries in which family planning is not widespread. On the health side, bearing children at an early age entails significant risks to the health of both the mother and the child. Early childbearing also tends to restrict educational and economic opportunities for women.

Table 4.11 presents the distribution of Pakistani women by their age at first birth. The majority of women in Pakistan did not have their first birth until after their twentieth birthday. Childbearing before age 15 has always been uncommon and it is becoming increasingly rare over time. More than one-fifth of women age 25-49, however, had their first birth before age 18 whereas about 40 percent had their first birth during their teenage years. In recent years, there has been a rapid decline in the extent to which women begin childbearing during their teenage years. For example, whereas 42 percent of women age 25-29 had their first birth before age 20, only 30 percent of women age 20-24 had their first child that early.

Table 4.11 Age at first birth

Percent distribution of ever-married women by age at first birth, according to current age, Pakistan 1990-91

Current age	Women with no birth	Age at first birth						Total	Number of women	Median age at first birth
		<15	15-17	18-19	20-21	22-24	25+			
15-19	87.8	1.5	6.7	4.1	--	--	--	100.0	1720	a
20-24	54.3	3.3	13.9	13.3	10.6	4.8	--	100.0	1747	a
25-29	23.0	5.3	18.7	18.1	15.7	14.0	5.3	100.0	1745	21.0
30-34	9.2	4.4	20.0	17.3	16.1	19.7	13.3	100.0	1241	20.9
35-39	5.4	3.4	16.4	18.4	16.5	20.6	19.3	100.0	1005	21.4
40-44	5.5	6.3	15.6	15.6	15.5	19.8	21.8	100.0	865	21.7
45-49	5.5	4.8	12.4	15.7	12.9	22.2	26.5	100.0	630	22.6

-- Less than 0.05 percent
[a]Less than 50 percent of the women have had a birth by the beginning of the age group.

Differentials in the age at first birth are shown in Table 4.12. The median age at first birth for all women age 25-49 is 21.3 years. Overall, there is little variation in the median age at first birth by place of residence or by education, except for women who have attended the highest education level. For the youngest age group, the median age at first birth is lowest in rural areas, in Balochistan and among

Table 4.12 Age at first birth by background characteristics

Median age at first birth among women aged 25-49 years, by current age and selected background characteristics

Background characteristic	Current age					Ages 25-49
	25-29	30-34	35-39	40-44	45-49	
Residence						
Total urban	21.7	20.9	20.8	21.5	21.4	21.3
Major city	21.8	21.0	20.6	20.7	21.3	21.1
Other urban	21.6	20.8	21.2	22.1	21.5	21.4
Rural	20.6	20.9	22.0	21.7	23.2	21.3
Province						
Punjab	21.6	21.0	21.6	21.8	22.7	21.6
Sindh	19.8	20.6	21.2	21.0	21.7	20.6
NWFP	21.2	20.8	21.0	21.3	23.6	21.4
Balochistan	18.3	20.4	22.0	22.7	25.3	20.3
Education level attended						
No education	20.3	20.5	21.3	21.6	22.8	21.0
Primary	20.7	21.5	21.5	20.0	21.0	21.1
Middle	22.1	20.2	19.7	20.6	23.2	21.1
Secondary+	25.0	24.7	23.0	23.3	22.5	24.0
Total	21.0	20.9	21.4	21.7	22.6	21.3

women with little or no education. These patterns, however, are not regular across all age groups.[2] The most consistent pattern is the late initiation of childbearing among women who have gone beyond middle school.

4.5 Teenage Fertility

Some information on teenage fertility was already presented in the section on age at first birth. More detailed findings on teenage fertility are discussed in this section. Table 4.13 presents information on the childbearing experiences of women age 15-19. Column one shows the percentage of teenagers who are already mothers; column two shows the percentage who are pregnant with their first child. The sum of these two columns indicates the percentage of young women who have already begun childbearing. Overall, one in eight teenage women was a mother and another four percent were pregnant with their first child at the time of the survey. The proportion who have started childbearing increases with age. For example, at ages 15 and 16, only six percent of women have begun childbearing. After age 16, the proportion increases steadily to a level of 31 percent by age 19. While these figures demonstrate that there is a substantial amount of teenage childbearing in Pakistan, it is noteworthy that more than two-thirds of women who are 19 years old have not begun childbearing. Early childbearing is particularly characteristic of rural women and women who have not attended school. Regional differences in early childbearing are not as pronounced, but women in Balochistan are somewhat more likely to begin childbearing early than are women in other provinces.

[2]The results for women age 45-49 should be interpreted cautiously since in demographic surveys older women often omit their first birth (particularly if the child died) or report the timing of their first birth erroneously.

Table 4.13 Teenage fertility

Percentage of teenagers 15-19 who are mothers or pregnant with their first child, by selected background characteristics, Pakistan 1990-91

Background characteristic	Percentage who are: Mothers	Pregnant with first child	Percentage who have begun childbearing	Number of teenagers
Age				
15	3.0	2.5	5.5	173
16	3.7	2.5	6.1	381
17	7.6	5.4	13.0	260
18	15.1	3.8	18.9	630
19	27.4	3.3	30.6	276
Residence				
Total urban	7.8	2.1	9.9	583
Major city	5.7	2.1	7.9	318
Other urban	10.2	2.1	12.3	264
Rural	14.5	4.3	18.7	1137
Province				
Punjab	12.6	4.3	16.9	1015
Sindh	12.0	2.4	14.4	345
NWFP	11.7	2.2	13.9	281
Balochistan	15.3	5.2	20.5	52
Education level attended				
No education	17.4	5.0	22.4	1007
Primary	8.3	2.1	10.4	248
Middle	4.9	--	4.9	115
Secondary+	3.1	2.1	5.3	256
Total	12.2	3.5	15.7	1720

-- Less than 0.05 percent

Teenage women who have begun childbearing are not likely to have had more than one birth (see Table 4.14). Only one respondent age 15-17 had two or more births and fewer than 10 percent of women age 19 had given birth to more than one child. Overall, 88 percent of women 15-19 have never given birth and only three percent have delivered more than one child. These findings suggest that the recent increase in the average age at first marriage in Pakistan has had a dampening effect on early childbearing and caused the large majority of women to delay childbearing at least until they have completed their teenage years.

Table 4.14 Children ever born to teenagers

Percent distribution of teenagers 15-19 by number of children ever born (CEB), according to single year of age, Pakistan 1990-91

Age	Number of children ever born			Total	Mean number of CEB	Number of teenagers
	0	1	2+			
15	97.0	3.0	--	100.0	--	173
16	96.3	3.7	--	100.0	--	381
17	92.4	7.3	0.3	100.0	0.1	260
18	84.9	11.3	3.8	100.0	0.2	630
19	72.6	17.9	9.5	100.0	0.4	276
Total	87.8	9.2	3.0	100.0	0.2	1720

-- Less than 0.05 percent or mean less than 0.05 children

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CHAPTER 5

KNOWLEDGE AND USE OF FAMILY PLANNING

Nasra M. Shah and Syed Mubashir Ali

In a country with a persistently high population growth rate such as Pakistan, the level of knowledge about family planning and the use of family planning methods remain very important demographic issues. Information on contraceptive use by various methods is of particular importance to policy makers, programme managers and researchers for formulating future programme strategies. An assessment of the extent of knowledge and use of contraception, therefore, constituted one of the primary objectives of the PDHS. This chapter describes women's knowledge of modern and traditional contraceptive methods as well as of their sources, the level of contraceptive use and the timing of contraceptive initiation, accessibility of family planning services and the cost of contraceptive methods. Differentials in knowledge and use according to demographic and socioeconomic characteristics of the respondents are also discussed.

5.1 Knowledge of Family Planning Methods and Sources

Levels and Trends

The question used to elicit knowledge about family planning was phrased: "Now I would like to talk about family planning—the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about?" The respondent was first asked to report all the methods she knew without any prompting. Once she completed her spontaneous reporting, the interviewer read out the names and a short description of the remaining methods on the list and asked if she knew each one of them. In this way, her "complete" knowledge of contraception was obtained. The contraceptive methods included in the survey are shown in Table 5.1.

Almost four-fifths of ever-married and currently married women reported knowledge of at least one method. Almost all the women who reported such knowledge knew of a modern method. One-quarter of all women knew of a traditional method, mostly periodic abstinence or withdrawal. Female sterilisation, the pill, and injection were the best known methods. A distinction can be made, however, between prompted and unprompted knowledge. If just unprompted knowledge is considered, only about half of all women reported that they knew any method.

Women who reported knowing of a method were asked if they knew where they could go to obtain the method. Of all currently married women, 25 to 30 percent knew where they could obtain the pill, an IUD, or an injection. The largest percentage (37 percent) knew where they could get sterilisation services. In the case of periodic abstinence, only 9 percent of women knew where to get advice on how to use this method.

Table 5.1 Knowledge and source of contraceptive methods

Percentage of ever-married women and currently married women who know specific contraceptive methods and who know a source (for information or services), by specific method, Pakistan 1990-91

Contraceptive method	Ever-married women			Currently married women			Ever-married women	Currently married women
	Know method	Unprompted knowledge	Prompted knowledge	Know method	Unprompted knowledge	Prompted knowledge	Know a source	Know a source
Any method	77.9	49.1	28.8	77.9	49.3	28.6	46.2	46.3
Any modern method	77.3	46.4	30.8	77.2	46.7	30.5	44.8	44.9
Pill	62.2	30.2	32.0	62.2	30.2	32.0	29.6	30.1
IUD	51.6	19.2	32.3	51.5	19.3	32.1	24.9	25.1
Injection	62.1	27.7	34.3	62.2	27.9	34.3	29.8	30.1
Vaginal method	12.7	3.1	9.5	12.7	3.1	9.6	7.0	7.0
Condom	35.0	14.7	20.3	35.3	14.8	20.5	19.1	19.3
Female sterilisation	69.6	24.0	45.6	69.7	24.2	45.5	37.0	37.0
Male sterilisation	20.2	3.0	17.2	20.2	3.0	17.3	11.4	11.5
Any traditional method	25.6	10.4	15.2	25.7	10.4	15.3	NA	NA
Periodic abstinence	17.8	5.7	12.0	17.8	5.7	12.0	9.3	9.4
Withdrawal	14.2	3.2	11.0	14.3	3.2	11.0	NA	NA
Other	3.5	3.5	NA	3.5	3.5	NA	NA	NA
Number of women	6611	6611	6611	6364	6364	6364	6611	6364

NA = Not applicable

Comparison of the level of contraceptive knowledge in the PDHS with earlier surveys reveals some unusual patterns. The comparisons are not straightforward, since some surveys included prompted responses about specific methods, while others included only the respondent's spontaneous (unprompted) knowledge. Looking only at unprompted knowledge, the percentage of currently married women who reported knowing about any method fluctuated from 76 percent in the 1975 Pakistan Fertility Survey (PFS) to 26 percent in the 1979-80 Population, Labour Force and Migration Survey (PLM) to 49 percent in the 1990-91 PDHS. Looking at prompted and unprompted knowledge combined, the percentages still vary greatly, from 97 percent of married women interviewed in 1968-69 in the National Impact Survey—when the family planning programme was only four years old—to 62 percent in the 1984-85 Contraceptive Prevalence Survey and 78 percent in the PDHS (see Table 5.2). Thus, it appears that the overall level of contraceptive knowledge, which showed a decline in the last two decades, has made headway in recent years, assuming that the measurement in the PDHS was of the same quality as in the earlier surveys. The reason for the fluctuations in the level of contraceptive knowledge is unclear; however, it is possible that the social climate that influences the respondent's reporting of knowledge of contraception might have become more restrictive beginning in the late 1970s, as was pointed out by analysts of the 1979-80 Pakistan Population, Labour Force and Migration Survey (Soomro et al. [1984]).

Table 5.2 Trends in contraceptive knowledge

Percentage of currently married women who know specific contraceptive methods, 1990-91 PDHS, 1984-85 PCPS, and 1968-69 NIS

Contraceptive method	1990-91 PDHS	1984-85 PCPS	1968-69 NIS
Any method	77.9	61.5	97.0
Pill	62.2	54.1	37.7
IUD	51.5	43.4	72.1
Injection	62.2	46.7	U
Vaginal method	12.7	16.2	38.8
Condom	35.3	28.9	42.3
Female sterilisation	69.7	50.6	47.9
Male sterilisation	20.2	18.8	36.7
Periodic abstinence	17.8	5.8	13.7
Withdrawal	14.3	9.0	16.5

Note: Figures are for *total knowledge;* i.e., knowledge based on unprompted (spontaneous) and prompted responses.
U = Unknown; no information
Source: Population Welfare Division (1986); Soomro et al. [1984].

Differentials in Knowledge

Table 5.3 shows the knowledge of modern contraceptive methods and the source for methods among currently married women by selected background characteristics. In terms of respondent's age, women 30-39 years, who are likely to have the greatest need for contraception, reported the highest levels of knowledge (81 percent had heard of a modern method). Only 66 percent of women age 15-19 knew of a modern method of contraception.

There are large differences in reported knowledge between urban and rural areas (see Figure 5.1). Ninety-four percent of currently married women residing in major cities knew of at least one modern method of contraception and three-fourths knew where to obtain a method. Among rural women, 71 percent knew of a modern method and 34 percent knew where to obtain a method. A comparison with earlier surveys indicates that the urban-rural differential in knowledge of family planning has increased over time (data not shown). While women in the provinces of Punjab, Sindh and NWFP had knowledge of modern methods ranging from 74 to 83 percent, only 37 percent of the Balochi women reported knowing of a modern method. Similarly, only about half as many Balochi women knew a source for a modern method as women in the other provinces.

Table 5.3 Knowledge of modern contraceptive methods and source for methods

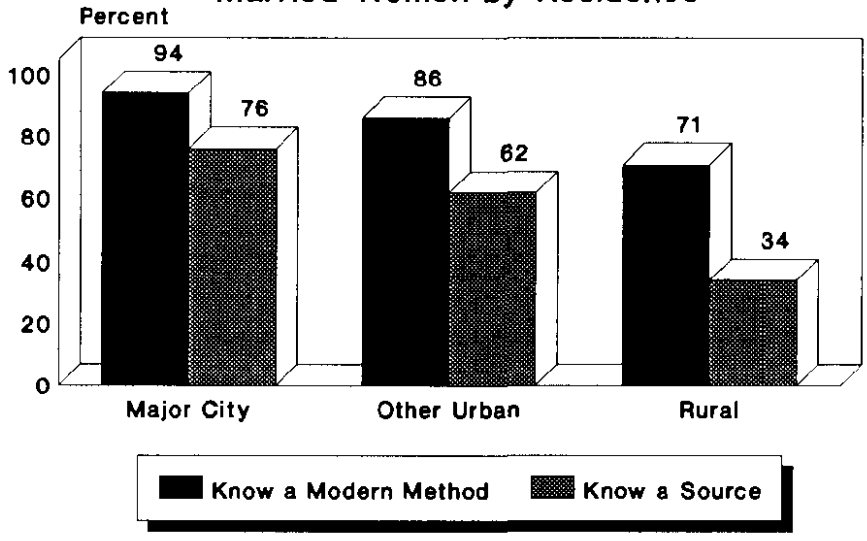
Percentage of currently married women who know at least one modern contraceptive method and who know a source (for information or services), by background characteristics, Pakistan 1990-91

Background characteristic	Know any method	Know a modern method[1]	Know source for modern method	Number of women
Age				
15-19	66.3	65.8	32.3	418
20-24	75.0	74.4	39.2	1041
25-29	77.4	76.7	43.6	1452
30-34	81.8	81.2	48.4	1147
35-39	81.5	81.3	53.2	931
40-44	78.7	77.9	47.2	803
45-49	77.8	76.6	44.1	572
Residence				
Total urban	91.3	90.6	69.9	1930
Major city	94.5	93.8	75.7	1098
Other urban	87.2	86.4	62.3	832
Rural	72.0	71.4	34.0	4434
Province				
Punjab	80.6	79.9	46.2	3768
Sindh	74.4	73.9	45.3	1486
NWFP	83.6	83.3	44.8	856
Balochistan	38.5	36.5	23.8	254
Education level attended				
No education	73.8	73.0	37.7	5044
Primary	91.7	91.7	64.3	573
Middle	93.6	93.6	72.4	279
Secondary+	95.6	95.0	81.9	468
Work status[2]				
Currently working	72.7	72.5	40.0	1033
Worked before marriage only	85.8	85.7	57.7	282
Worked after marriage only	81.9	81.9	64.1	43
Worked before and after marriage	75.7	74.5	39.2	69
Never worked	78.5	77.7	45.0	4916
Total	77.9	77.2	44.9	6364

[1]Includes pill, IUD, injection, vaginal methods (diaphragm/foam/jelly), condom, female sterilisation and male sterilisation

[2]Excludes 21 women with missing information on work status. "Never worked" means that the woman is not currently working and she did not work either before marriage or just after marriage.

Figure 5.1
Knowledge of Modern Contraceptive Methods and Sources among Currently Married Women by Residence



PDHS 1990-91

The major difference in contraceptive knowledge by education is between women with no education and those who have at least some education. Only 73 percent of women with no education knew of a modern method, compared with 92 percent of those who had gone to primary school and 95 percent of those who had received at least some education at the secondary level. Similarly, only 38 percent of the women with no education knew where to obtain a method, compared with 82 percent of the ones with secondary or higher education.

Finally, the relative level of contraceptive knowledge of working and nonworking women does not show any clear pattern. One might expect working women to have greater exposure and knowledge; however, the results in Table 5.3 indicate that this is not always the case. Women who worked only before or after marriage are more likely to know a modern contraceptive method (86 percent and 82 percent, respectively) than those who have never worked (78 percent), but those who have never worked are slightly more likely to know a modern method than those who are currently working (73 percent). Earlier research in Pakistan has shown that working women typically belong to the lower socioeconomic stratum (Shah 1986) and are likely to be less knowledgeable about contraception. This is consistent with the finding in Table 3.10 that working women are the least educated group overall.

5.2 Contraceptive Use

Ever Use of Family Planning Methods

In the PDHS all respondents who knew at least one method were asked whether they had ever used the known methods. This was further probed by asking whether they "ever used anything or tried in any way to delay or avoid getting pregnant." Table 5.4 shows that one-fifth of ever-married and of currently married women had used a contraceptive method at some time in the past. Sixteen percent of currently married women had used a modern method, while 9 percent had used a traditional method. Periodic abstinence was the most commonly used traditional method.

Table 5.4 Ever use of contraception

Percentage of ever-married and of currently married women who have ever used any contraceptive method, by specific method and age, Pakistan 1990-91

Contraceptive method	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
	EVER-MARRIED WOMEN							
Any method	3.3	12.7	18.6	23.5	31.1	25.5	19.1	20.3
Any modern method	2.4	8.0	15.1	19.1	25.1	20.0	15.4	16.0
Pill	1.1	2.2	3.7	5.7	6.0	7.0	4.2	4.5
IUD	0.6	1.4	4.0	4.9	4.1	3.9	2.2	3.4
Injection	0.4	1.5	2.7	4.0	5.9	3.2	3.0	3.2
Vaginal method	--	0.4	0.3	0.4	1.1	0.4	0.4	0.5
Condom	1.4	3.9	8.8	9.2	10.2	6.6	4.6	7.1
Female sterilisation	--	0.5	0.8	2.7	7.6	7.6	6.6	3.5
Male sterilisation	--	--	0.1	0.1	0.2	--	0.4	0.1
Any traditional method	1.2	6.4	8.5	9.9	13.3	9.9	6.6	8.7
Periodic abstinence	1.1	2.4	5.2	5.2	8.2	6.3	3.7	4.9
Withdrawal	0.5	3.0	3.6	5.3	6.2	2.7	1.9	3.7
Other	0.2	2.5	1.4	1.8	1.6	2.7	2.1	1.8
Number of women	428	1059	1494	1187	981	844	617	6611
	CURRENTLY MARRIED WOMEN							
Any method	3.1	12.9	19.1	24.0	32.1	25.9	19.6	20.7
Any modern method	2.3	8.2	15.5	19.4	25.8	20.1	15.8	16.2
Pill	0.9	2.3	3.7	5.9	6.3	7.0	4.5	4.5
IUD	0.4	1.4	4.1	4.9	4.1	3.6	1.8	3.3
Injection	0.4	1.6	2.7	4.2	6.2	3.2	3.3	3.3
Vaginal method	--	0.4	0.3	0.4	1.2	0.4	0.4	0.5
Condom	1.3	4.0	9.1	9.4	10.1	6.2	4.7	7.2
Female sterilisation	--	0.5	0.9	2.7	8.0	8.0	6.8	3.5
Male sterilisation	--	--	0.1	0.1	0.2	--	0.4	0.1
Any traditional method	1.0	6.5	8.7	10.0	13.9	10.3	6.7	8.9
Periodic abstinence	0.9	2.5	5.3	5.2	8.4	6.5	3.8	5.0
Withdrawal	0.5	3.1	3.7	5.4	6.5	2.8	1.9	3.8
Other	--	2.5	1.4	1.8	1.7	2.8	2.1	1.9
Number of women	418	1041	1452	1147	931	803	572	6364

-- Less than 0.05 percent

The most commonly used modern methods were the condom (7 percent), followed by the pill (5 percent) and female sterilisation (4 percent). Less than one percent of the women reported ever having used a vaginal method such as the diaphragm, spermicides, or suppositories and a negligible proportion (0.1 percent) reported the use of male sterilisation.

In terms of age, one-fifth or more of ever-married and of currently married women age 30-44 had used a modern method. Contraceptive use rates were highest in the age group 35-39, where knowledge was reported to be the highest (Table 5.3). A low use rate was observed among the youngest women: only 2 percent of those age 15-19 had ever used a modern method. The use of traditional methods was highest (13-14 percent) in the age group 35-39, followed by 10 percent in the adjacent age groups 30-34 and 40-44.

Levels of ever use from the PDHS are considerably higher (21 percent) than those estimated from previous surveys. Data from the 1968-69 National Impact Survey (NIS), the 1975 Pakistan Fertility Survey (PFS), the 1979-80 Population, Labour Force and Migration Survey (PLM) and the 1984-85 Pakistan Contraceptive Prevalence Survey (PCPS) show levels of ever use among currently married women to be 12 percent, 11 percent, 5 percent, and 12 percent, respectively (Soomro et al. [1984]; Population Welfare Division 1986). While differences in the methods asked about and in the implementation of the surveys may account for some of the differences, it seems likely that there has been a substantial recent increase in the ever use of contraception in the country.

Current Use of Family Planning Methods

Regarding current use at the time of survey,[1] 12 percent of currently married women reported that they were using some method to delay or prevent pregnancy (see Table 5.5). Three-fourths of the current users were using a modern method and one-fourth a traditional method. The most widely used method was female sterilisation (4 percent), followed by the condom (3 percent) and the IUD (1 percent). Less than one percent were using either the pill or injection (a recently introduced method).

[1]In the PDHS, no reference period was defined for current use. The woman was asked whether she or her husband were currently using a method.

Table 5.5 Current use of contraception

Percent distribution of currently married women by current use of contraceptive methods, according to age, Pakistan 1990-91

Contraceptive method	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Any method	2.6	6.3	9.6	13.4	20.4	15.8	11.8	11.8
Any modern method	1.9	3.8	7.4	9.6	15.8	12.8	10.3	9.0
Pill	0.2	0.8	0.8	0.7	0.9	0.8	--	0.7
IUD	0.4	0.7	1.8	1.9	1.4	1.1	0.4	1.3
Injection	0.4	0.4	0.4	0.6	1.6	1.1	1.1	0.8
Vaginal method	--	--	--	--	0.1	--	--	--
Condom	0.8	1.5	3.6	3.6	3.8	1.8	1.9	2.7
Female sterilisation	--	0.5	0.9	2.7	7.9	8.0	6.8	3.5
Male sterilisation	--	--	--	0.1	0.2	--	--	--
Any traditional method	0.7	2.5	2.3	3.8	4.5	3.0	1.5	2.8
Periodic abstinence	0.5	0.7	1.0	1.6	2.6	1.7	0.4	1.3
Withdrawal	0.1	1.1	1.0	1.9	1.8	1.3	0.3	1.2
Other	--	0.6	0.3	0.3	0.2	--	0.8	0.3
Not currently using	97.4	93.7	90.4	86.6	79.6	84.2	88.2	88.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	418	1041	1452	1147	931	803	572	6364

-- Less than 0.05 percent

The level of contraceptive use varies with the age of women, increasing from less than three percent for married women age 15-19 to a high of 20 percent for women 35-39, and decreasing thereafter. It is assumed that younger women are less likely to use contraception because they have recently started their families, while older women, whose current use is more than the national average, are more likely to use due to the pressure of frequent pregnancies and large family size. Younger women typically use a temporary method such as the condom, periodic abstinence, or withdrawal, while sterilisation is more common among older women (8 percent of women age 35-44 have been sterilised). It is notable that even among women age 35 and over, the condom is the second most widely used method.

Table 5.6 shows the contraceptive use rates (ever use and current use) among non-pregnant women. A total of 22 percent of non-pregnant currently married women reported that they had ever used contraception while 14 percent were currently using various methods (11 percent modern methods and 3 percent traditional methods). Among modern methods, female sterilisation (a permanent method) was used most frequently (4 percent), followed by the condom (3 percent), IUD (2 percent), injection and the pill (1 percent each). Modern methods had been used by 17 percent of non-pregnant women and traditional methods had been used by 10 percent. The most prominent modern method among ever-users was the condom (8 percent), followed by the pill (5 percent), sterilisation and the IUD (4 percent each), and injection (3 percent).

Table 5.6 Use of contraception by non-pregnant women

Percentage of currently married non-pregnant women who have ever used and are currently using a contraceptive method, by specific method, Pakistan 1990-91

Contraceptive method	Ever used	Currently using
Any method	22.0	14.0
Any modern method	17.1	10.7
Pill	4.7	0.8
IUD	3.6	1.5
Injection	3.2	0.9
Vaginal method	0.5	--
Condom	7.5	3.2
Female sterilisation	4.2	4.2
Male sterilisation	0.1	--
Any traditional method	9.6	3.3
Periodic abstinence	5.4	1.5
Withdrawal	4.1	1.4
Other	2.1	0.4
Never used/Not currently using	78.0	86.0
Total	NA	100.0
Number of women	5375	5375

-- Less than 0.05 percent
NA = Not applicable

The level of contraceptive use reported in the PDHS represents a substantial increase from that reported in either the 1975 PFS or the 1984-85 PCPS. Both these surveys calculated contraceptive use for currently married **non-pregnant** women; the results from all three surveys, calculated on this basis, are given in Table 5.7. Contraceptive use among married, non-pregnant women has almost tripled in 15 years, from 5 percent in 1975 to 9 percent in 1984-85 and 14 percent in 1990-91. In particular, female sterilisation has gained importance over the last two decades. Only 1 percent of married non-pregnant women were reported in the 1975 PFS to have been sterilised; in the 1984-85 PCPS, this had increased to 2.6 percent and by 1990-91, to 4.2 percent, a fourfold increase in 15 years.

Table 5.7 Trends in contraceptive use

Percentage of currently married, non-pregnant women age 15-49 who are currently using a contraceptive method, 1990-91 PDHS, 1984-85 PCPS and 1975 PFS

Contraceptive method	1990-91 PDHS	1984-85 PCPS	1975 PFS
Any method	14.0	9.1	5.5
Any modern method	10.7	7.6	4.0
Pill	0.8	1.4	1.0
IUD	1.5	0.8	0.7
Injection	0.9	0.6	U
Vaginal method	--	0.1	0.2
Condom	3.2	2.1	1.0
Female sterilisation	4.2	2.6	1.0
Male sterilisation	--	--	--
Any traditional method	3.3	1.5	1.5
Periodic abstinence	1.5	0.1	0.1
Withdrawal	1.4	0.9	0.1
Other	0.4	0.5	1.3
Number of women	5375	U	4441

Note: Figures for the PFS include use of prolonged abstinence as "other," which is analogous to the PCPS and PDHS, since there was no probing of methods.
-- Less than 0.05 percent
U = Unknown; no information
Source: Population Planning Council of Pakistan (1976); Population Welfare Division (1986:88).

The condom, the second most widely used method, has gained in popularity compared to the pill. This may be due to the general availability of condoms through a commercial social marketing programme, Social Marketing of Contraceptives (SMC). Similarly, IUD use has doubled from 0.8 percent in the 1984-85 PCPS to 1.5 percent in the 1990-91 PDHS. The introduction of the Copper T into the programme has probably been the principal reason for this increase.

Socioeconomic Differentials in Current Use of Family Planning

Table 5.8 shows the sociodemographic differentials in current contraceptive use. As in previous surveys, a large urban-rural differential continues to exist (see Figure 5.2). The proportion of married urban women using a modern method (19 percent) is almost four times greater than that of rural women (5 percent). The urban-rural differential holds for each method; for example, 9 percent of the women in major cities have been sterilised, compared to 6 percent of women in other urban areas and 2 percent of women in rural areas. It should also be noted that in both rural and urban areas, current use of any method has increased since the 1984-85 PCPS, which showed a rate of 16 percent for urban and 5 percent for rural areas.

Table 5.8 Current use of contraception by background characteristics

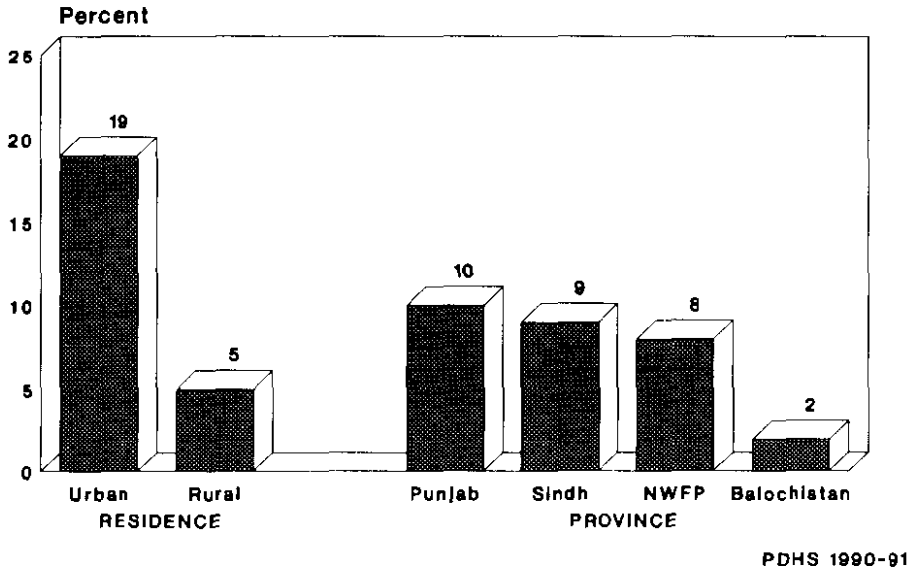
Percent distribution of currently married women by contraceptive method currently being used, according to background characteristics

Background characteristic	Any method	Any modern method	Pill	IUD	Injection	Vaginal method	Condom	Female sterilisation	Male sterilisation	Any trad. method	Periodic abstinence	Withdrawal	Other	Not currently using	Total	Number
Residence																
Total urban	25.7	18.7	1.4	2.0	1.2	--	6.7	7.3	0.1	7.1	3.4	3.0	0.6	74.3	100.0	1930
Major city	31.0	22.3	1.4	2.4	1.0	0.1	8.9	8.5	0.1	8.7	4.2	4.0	0.5	69.0	100.0	1098
Other urban	18.8	13.9	1.4	1.4	1.4	--	3.8	5.7	0.2	4.9	2.4	1.8	0.7	81.2	100.0	832
Rural	5.8	4.8	0.4	0.9	0.6	--	1.0	1.9	--	1.0	0.4	0.4	0.2	94.2	100.0	4434
Province																
Punjab	13.0	9.8	0.6	1.5	0.8	--	3.0	3.8	0.1	3.2	1.4	1.5	0.3	87.0	100.0	3768
Sindh	12.4	9.1	0.7	0.9	0.4	--	3.4	3.5	--	3.4	1.7	1.3	0.4	87.6	100.0	1486
NWFP	8.6	7.6	1.3	1.1	1.1	0.1	0.8	3.2	--	1.0	0.6	0.3	0.1	91.4	100.0	856
Balochistan	2.0	1.7	0.7	0.5	0.1	--	0.2	0.3	--	0.3	0.2	0.1	--	98.0	100.0	254
Education																
No education	7.8	6.2	0.5	1.0	0.5	--	1.1	3.0	--	1.6	0.8	0.5	0.3	92.2	100.0	5044
Primary	17.8	14.0	1.5	1.5	1.2	--	4.5	5.1	0.2	3.8	1.7	1.8	0.3	82.2	100.0	573
Middle	29.5	21.7	1.6	1.1	3.1	0.1	8.5	6.8	0.5	7.8	3.4	3.8	0.6	70.5	100.0	279
Secondary+	38.0	25.9	1.1	4.0	1.1	0.1	14.4	5.2	--	12.1	4.8	7.0	0.2	62.0	100.0	468
Number of living children																
0	0.1	0.1	--	--	--	--	0.1	--	--	--	--	--	--	99.9	100.0	810
1	3.2	2.0	0.2	--	0.4	--	1.4	--	--	1.2	0.5	0.5	0.2	96.8	100.0	834
2	10.7	8.0	0.8	1.4	0.3	--	4.5	1.0	--	2.7	1.1	1.0	0.6	89.3	100.0	812
3	11.1	7.8	0.9	1.4	0.5	--	3.1	1.9	--	3.3	1.2	2.0	0.1	88.9	100.0	914
4	17.1	12.6	1.2	1.5	0.8	--	3.9	4.8	0.3	4.5	1.7	2.4	0.4	82.9	100.0	856
5	18.0	14.0	1.4	1.7	1.8	--	4.5	4.8	--	3.9	2.6	1.1	0.2	82.0	100.0	647
6+	18.4	14.8	0.6	2.1	1.3	0.1	2.1	8.5	--	3.6	1.8	1.3	0.5	81.6	100.0	1492
Total	11.8	9.0	0.7	1.3	0.8	--	2.7	3.5	--	2.8	1.3	1.2	0.3	88.2	100.0	6364

-- Less than 0.05 percent

In terms of provincial variation, Balochi women reported the lowest level of current use—only 2 percent were using modern methods, which is consistent with the low level of contraceptive knowledge among Balochi women. In contrast, 10 percent of women in Punjab were using modern methods.

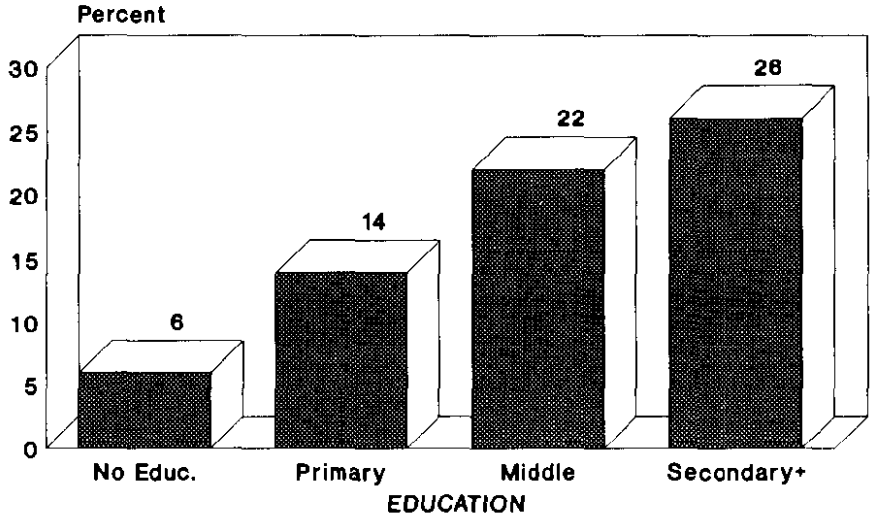
Figure 5.2
Current Use of Modern Contraceptive Methods among Currently Married Women 15-49 by Residence and Province



Another major differential that continues to hold is related to women's education. A strong positive relationship exists between education and the level of current use (see Figure 5.3). The percentage of married women using a modern contraceptive method increases from 6 percent of women with no education to 26 percent of women with secondary or higher education. This same association exists in the case of condom use and the use of traditional methods, with use being much greater among women who have attended secondary or higher education. The relationship is less obvious for female sterilisation and many of the other methods; the percentage of sterilised women, for example, was almost the same among those who attended primary school and those who attended secondary school or higher.

Finally, a positive association exists between the number of living children a woman has and current use. This was especially marked regarding use of female sterilisation. Only 2 percent of the women with three children had been sterilised, compared with 5 percent of those with four or five children and 9 percent of those with six or more children.

Figure 5.3
Current Use of Modern Contraceptive Methods among Currently Married Women 15-49 by Education



PDHS 1990-91

Number of Children at First Use of Contraception

In order to investigate when during the family building process couples become motivated to initiate family planning use, the PDHS included a question for all women who had ever used a method as to how many living children they had when they first used a method. Overall, less than half (46 percent) of those who had ever used family planning initiated use when they had fewer than three living children (see Table 5.9). As expected, very few women initiated contraceptive use before they had any children (0.5 percent). There appears to be a slight tendency for younger women to have initiated family planning use at lower parities than older women. A larger proportion of women living in major cities (34 percent) started using a method when they had fewer than four children than women living in other urban areas (19 percent) and those living in rural areas (5 percent). Users in NWFP started using a method much later than their counterparts in other provinces. Women who attended secondary school or a higher level of education started using a contraceptive method earlier than women with no education.

Table 5.9 Number of children at first use of contraception

Percent distribution of ever-married women by number of living children at the time of first use of contraception, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Never used contra-ception	Number of living children at the time of first use of contraception								Missing	Total	Number of women
		0	1	2	3	4	5	6	7+			
Age												
15-19	96.7	0.3	2.1	0.9	--	--	--	--	--	--	100.0	428
20-24	87.3	0.8	6.3	3.2	0.8	0.7	0.1	0.1	--	0.6	100.0	1059
25-29	81.3	0.6	5.9	4.9	3.4	2.3	0.9	0.3	0.2	0.2	100.9	1494
30-34	76.5	0.6	4.1	5.3	3.7	4.5	2.1	1.5	1.5	0.2	100.0	1187
35-39	68.9	0.2	4.3	6.2	4.6	4.2	3.1	4.1	4.3	0.1	100.0	981
40-44	74.5	0.3	4.7	3.7	2.7	2.7	2.9	2.8	5.7	--	100.0	844
45-49	80.9	0.3	1.8	2.4	2.2	1.8	2.1	3.3	5.3	--	100.0	617
Residence												
Total urban	58.9	1.0	9.8	10.2	6.4	5.1	2.7	2.6	3.2	0.1	100.0	2019
Major city	51.3	1.7	12.3	12.3	7.3	5.9	2.6	3.3	3.3	0.1	100.0	1151
Other urban	69.0	0.2	6.5	7.3	5.2	4.1	2.9	1.8	2.9	0.1	100.0	868
Rural	88.8	0.2	2.3	1.6	1.2	1.5	1.1	1.2	1.7	0.3	100.0	4592
Province												
Punjab	77.7	0.4	5.4	4.8	3.0	3.0	1.8	1.8	1.9	0.2	100.0	3948
Sindh	78.4	0.9	4.8	4.9	3.4	2.4	1.2	1.4	2.3	0.2	100.0	1529
NWFP	86.0	0.1	1.8	1.8	1.7	1.6	2.1	1.6	3.3	0.1	100.0	878
Balochistan	95.2	0.1	1.6	0.7	0.4	0.5	0.3	0.2	0.9	0.1	100.0	255
Education level attended												
No education	85.7	0.3	2.3	2.6	1.7	2.1	1.5	1.4	2.2	0.1	100.0	5237
Primary	67.3	0.1	5.1	8.1	5.6	3.6	3.4	3.6	2.5	0.8	100.0	601
Middle	55.9	1.4	12.4	9.5	7.9	7.0	1.1	1.1	3.4	0.4	100.0	288
Secondary+	43.6	2.6	24.4	14.6	7.7	3.7	1.1	1.5	0.5	0.1	100.0	485
Total	79.7	0.5	4.6	4.2	2.8	2.6	1.6	1.6	2.2	0.2	100.0	6611

-- Less than 0.05 percent

Use of Social Marketing Brand Condoms

The increase in condom use documented in the PDHS may be attributed at least partially to the active social marketing of this method. Table 5.10 shows that more than one-third (36 percent) of all couples who were using condoms were using the social marketing brand (Sathi), 18 percent were using the brand distributed in the government's family planning programme (Sultan) and 8 percent were using other brands. These figures underestimate the importance of the social marketing brand of condoms, as well as the other brands, since they include the responses of women who did not know the brand of condoms used by their husbands. When we consider only those respondents who knew the brand name of the condoms their husbands were using, 58 percent reported Sathi, 29 percent reported Sultan and 13 percent reported the use of other brands.

Table 5.10 Brand names of condoms

Percent distribution of condom users by brand names of condoms currently being used, according to urban-rural residence, Pakistan 1990-91

Residence	Sathi	Sultan	Other brand	Don't know	Total	Number
Total urban	36.3	17.2	11.2	35.4	100.0	126
Major city	37.0	17.8	10.4	34.7	100.0	94
Other urban	(34.2)	(15.1)	(13.5)	(37.2)	(100.0)	32
Rural	(35.4)	(21.8)	(--)	(42.8)	(100.0)	43
Total	36.1	18.3	8.4	37.2	100.0	169

Note: Excludes three women with information missing on brand name. Figures in parentheses are based on 25 to 49 unweighted women.
-- Less than 0.05 percent

5.3 Knowledge of the Fertile Period

Earlier in this chapter it was reported that 18 percent of the currently married women had heard about periodic abstinence as a method of contraception and 9 percent knew where to get information about this method (see Table 5.1). A total of 5 percent of currently married women reported that they had ever used periodic abstinence as a method of contraception (see Table 5.4). The successful use of periodic abstinence as a method of contraception is, to some extent, dependent on a woman's knowledge of the fertile period. Table 5.11 shows respondents' knowledge about the time during the menstrual cycle when a woman is most likely to get pregnant. Only five percent of all ever-married women could correctly identify the fertile period as being in the middle of the cycle. Even among the women who said they have used periodic abstinence, less than one-third had accurate knowledge about the time a woman is at the highest risk of pregnancy.

Table 5.11 Knowledge of fertile period

Percent distribution of ever-married women and women who have ever used periodic abstinence by knowledge of the fertile period during the ovulatory cycle, Pakistan 1990-91

Perceived fertile period	Ever-married women	Ever users of periodic abstinence
During menstrual period	1.7	3.4
Right after period ends	6.9	38.7
Middle of her cycle	5.2	31.8
Just before period begins	1.3	8.2
At any time	0.6	0.2
Don't know	84.2	17.6
Total	100.0	100.0
Number	6611	326

Some remarks about the comprehensibility of this question are in order. The question dealing with the fertile period presented a special difficulty and often had to be repeated in order to be understood. It is therefore not surprising that 84 percent of the women said they did not know when the fertile period occurs. In a society where two-thirds of women have received no education (see Table 3.5) and knowledge about the reproductive period is obtained through informal social channels, it is not unusual that only a few women reported accurate knowledge of the fertile period. It follows that in order for periodic abstinence to be used as a programme method, a major educational effort would have to be implemented.

5.4 Age at Sterilisation

Some information about the age and time at which women obtain sterilisation operations is given in Table 5.12. Of the total women who reported sterilisation, 45 percent were sterilised less than four years before the survey, another one-third (34 percent) were sterilised 4-7 years before the survey and the remaining one-fifth were sterilised eight or more years before the survey. For those sterilised in the most recent time period—the four years before the survey—the data show that half of the sterilised women had the operation before they were age 35 and about one-third had the operation in their late 30s. It is difficult to assess trends in the age at sterilisation since the PDHS only interviewed women age 15-49 at the time of the survey. Thus, for the period eight or more years before the survey, there are no women age 45-49 and very few age 40-44, since these women would have been age 53-57 and 48-52, respectively, at the time of the survey. A recent study sponsored by the Family Planning Association of Pakistan, however, found that the age, as well as the parity, of sterilised women showed a declining trend (Rehan, n.d.).

Table 5.12 Timing of sterilisation

Percent distribution of sterilised women by age at the time of sterilisation, according to the number of years since the operation, Pakistan 1990-91

Years since operation	Age at time of operation						Total	Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44	45-49			
<4	7.5	18.4	24.3	29.6	17.1	2.9	100.0	102	33.4
4-7	1.2	15.8	41.4	29.9	11.7	--	100.0	77	33.7
8+	10.9	34.7	38.2	16.2	--	--	100.0	46	30.4
Total	6.1	20.8	33.0	27.0	11.8	1.3	100.0	225	32.8

-- Less than 0.05 percent
[1]Median ages have been calculated only for women less than 40 years of age to avoid problems of censoring

5.5 Source of Supply and Accessibility of Contraception

In order to evaluate the relative importance of various types of family planning service delivery mechanisms, the PDHS included a question about where current users obtained their methods. Overall, the government supplied over half (56 percent) of all modern methods used, while the private sector supplied 30 percent (see Table 5.13 and Figure 5.4). Four percent of users obtained their methods from other sources, while 10 percent (mostly condom users) did not know the source of their methods.

The mix of public vs. private sources varied according to the method used. For clinical methods (IUD and sterilisation), the government was by far the major source of supply; 85 percent of sterilised women and 81 percent of IUD users said that they had obtained services from a government source. More than half (53 percent) of the users of injection also got their supply from a government source. Users of supply methods (the pill and condoms) were less dependent on the government for their supply.

Table 5.13 Source of supply

Percent distribution of current users of modern contraceptive methods by most recent source of supply or information, according to specific method, Pakistan 1990-91

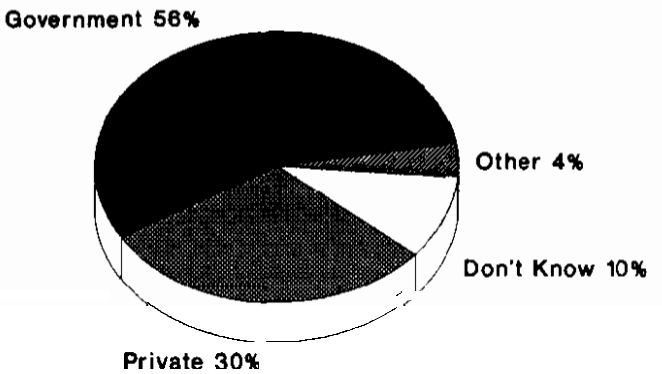
Source of supply or information	Pill	IUD	Injection	Condom	Female sterilisation	All methods[1]
Total government	34.9	81.1	53.0	11.7	85.1	55.7
Hospital/clinic	13.1	45.9	29.5	4.1	78.3	42.2
Family Welfare Centre	21.3	35.2	21.3	6.1	6.7	12.8
Other government	0.5	--	2.2	1.5	--	0.7
Total private	56.2	15.8	42.0	47.6	13.7	30.0
Doctor	6.7	2.0	20.1	1.7	3.6	4.6
Hospital	1.3	9.3	17.6	1.9	10.1	7.5
Drugstore	41.7	--	4.2	29.6	--	12.5
Other shop	6.5	--	--	13.1	--	4.4
TBA	--	4.5	--	1.3	--	1.0
Total other sources	5.2	--	4.7	11.5	--	4.3
Friends/relatives	4.7	--	4.6	3.3	--	1.7
Other sources	0.6	--	0.1	8.2	--	2.5
Don't know/missing	3.7	3.1	0.3	29.2	1.2	10.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	45	80	48	172	225	574

-- Less than 0.05 percent

[1] All methods include vaginal methods and male sterilisation, which are not shown separately.

As for specific sources, Family Welfare Centres, the main institutional structure through which contraceptives are provided, are an important source of services: 35 percent of IUD users and 21 percent each of users of the pill and injection are served by Family Welfare Centres. Government hospitals and clinics are the major source for female sterilisation, serving 78 percent of the women. These facilities served a large proportion of IUD and injection users as well. Drugstores and other shops are the major sources for pills and condoms (48 percent of pill users and 43 percent of condom users). A substantial proportion (38 percent) of women who use injection receive their shots from a private doctor or hospital. Thus, government and private sources are active in supplying various types of contraceptives. To facilitate the accessibility of contraceptive methods, both these sources need to be expanded.

Figure 5.4
Sources of Family Planning among Current Users of Modern Contraceptive Methods



PDHS 1990-91

The ease of obtaining a contraceptive method is an important factor in establishing contraceptive use. Thus, in the PDHS, each current user of a modern method was asked how long it took to travel from her home to the place where the method was obtained. These same questions were also asked of nonusers who knew of a source for family planning. The results are presented in Table 5.14.

Table 5.14 Time to source of supply for modern contraceptive methods

Percent distribution of current users of modern methods of family planning, nonusers of modern methods, and all ever-married women knowing any method and a source, by time to reach source of supply, according to urban-rural residence, Pakistan 1990-91

Minutes to source	Current users of modern methods					Nonusers of modern methods					Ever-married women who know a contraceptive method				
	Total urban	Major city	Other urban	Rural	Total	Total urban	Major city	Other urban	Rural	Total	Total urban	Major city	Other urban	Rural	Total
0-14	24.8	25.1	24.2	11.4	19.7	26.1	28.0	23.4	13.3	18.7	25.7	27.0	23.6	13.1	19.1
15-29	20.2	22.3	15.8	10.6	16.5	26.3	26.8	25.7	11.3	17.6	24.6	25.3	23.5	11.4	17.6
30-59	23.3	26.1	17.4	12.8	19.3	21.1	20.8	21.6	15.8	18.0	21.6	22.6	20.0	15.6	18.4
60+	27.6	22.2	38.7	63.0	41.0	20.6	19.6	22.0	53.6	39.6	22.8	20.5	26.5	54.3	39.4
Don't know time	4.1	4.2	3.9	2.3	3.4	5.9	4.9	7.3	6.0	6.0	5.3	4.6	6.4	5.6	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median	30.1	30.0	30.5	60.5	30.7	20.6	20.3	20.9	60.3	30.7	20.8	20.5	25.7	60.3	30.7
Number	307	206	101	187	494	713	418	295	976	1689	1014	623	391	1134	2148

Note: Table excludes women who do not know a source. Table also excludes those who mentioned friends, relatives, or others as the source. Although the time to get to a mobile clinic or field worker was not asked, it is assumed that these sources are within 15 minutes of the woman's home. Nonusers of modern methods and ever-married women who know a contraceptive method exclude current users of traditional methods.

In terms of how long it took the current users of modern methods to reach a source of supply, rural women reported a median of 61 minutes, compared with 30 minutes reported by urban women. About 63 percent of the rural users of modern methods said that it took them an hour or more to reach the facility from where they obtained their contraception, compared with 22 percent of the women in major cities and 39 percent in other urban areas. Differentials by time to reach a source reported by those who were not using modern methods and by all women who know a method were similar.

5.6 Cost of Contraception

The PDHS included a question for current users of the pill, IUD, condom, injection and female sterilisation about the cost of their methods. The results are presented in Table 5.15. Caution should be exercised in interpreting these data since the number of users is small.

Table 5.15 Costs of contraceptive methods

Average cost of contraception for current users and the percentage receiving method for free by contraceptive method, Pakistan 1990-91

Contraceptive method	Average cost (Rupees)		Number of users		Percent receiving free
	Total[1]	For those who pay	Total[1]	Who paid	
Pill (one packet)	7	(8)	35	29	15.5
IUD insertion	59	(100)	79	46	41.2
Injection	87	(102)	42	35	15.1
Condom	1	1	80	64	19.7
Sathi	(1)	(1)	37	34	(9.8)
Female sterilisation	756	2740	199	55	72.4

Note: Table excludes users who did not know the cost of their method. Figures in parentheses are based on 25 to 49 unweighted women.
[1] Includes those who received method free

A majority of the female sterilisations (72 percent) and 41 percent of the IUD insertions were provided free of charge, presumably by government hospitals or clinics, while a large majority of women who were using the pill, injection, or condoms had to pay for the services. The cost of pills and condoms is fairly low as a result of government subsidies: on average, one condom costs the user one rupee (for those who paid), while a cycle of pills costs eight rupees. The cost of an injection or an IUD insertion is substantial (about 100 rupees). In recent years injection has become a popular method and programme administrators would be well advised to encourage additional free or subsidized services for this method. Finally, those who paid for the sterilisation operation paid, on average, over 2,700 rupees. The high cost of this method puts it well beyond the reach of most couples. Hence, the programme emphasis on the provision of free sterilisations is well placed.

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CHAPTER 6

FAMILY PLANNING ATTITUDES

Abdul Razzaque Rukanuddin and Mehboob Sultan

A positive attitude toward family planning is one of the basic prerequisites for contraceptive use. This chapter discusses the interpersonal communication among husbands and wives about family planning; attitudes of couples toward family planning; whether they heard a family planning message on radio or television; their perceptions about the effectiveness of family planning messages in persuading couples to use family planning; and their attitudes toward family planning messages on radio or television.

6.1 Discussion of Family Planning Among Couples

Although husband-wife discussion of family planning is not a necessary condition for adopting contraception, earlier research in Pakistan does indicate that interspousal communication on family planning creates interest in and support for regulating fertility through contraceptive use (Shah 1974).

All currently married nonsterilised women who knew a contraceptive method were asked how often they talked with their husbands about family planning in the past year. Three-quarters of the women (74 percent) said they had not discussed this topic with their husbands in the previous year. Of the remaining 26 percent who had discussed the topic, 21 percent discussed family planning once or twice while 5 percent discussed it more often (see Table 6.1). A relatively high percentage of women age 30-39 (31 percent) reported that they had discussed family planning with their husbands, which is consistent with the greater use of contraception in this age group (20 percent). Women in their early and late reproductive years were least likely to have communicated with their husbands on family planning.

Substantial differences were also found on the basis of urban-rural residence, province, and educational attainment. Women in major cities were more than twice as likely as women in rural areas to have discussed family planning with their husbands (41 percent versus 20 percent). Similarly, women in Punjab were most likely to have discussed family planning (28 percent), followed by women in Sindh (25 percent), Balochistan (23 percent) and NWFP (17 percent). The findings of relatively low interspousal communication in Balochistan and NWFP are consistent with the low level of contraceptive use reported in these provinces.

As expected, the extent of husband-wife communication about family planning was positively related with the educational attainment of women. For example, women with some secondary or higher education were more then twice as likely to have discussed family planning with their husbands as women with no education (46 percent versus 21 percent). Women with secondary or higher education were also more likely to have discussed family planning with their husbands at least three times during the last year (16 percent) than women with a lower level of education or with no education at all.

Table 6.1 Discussion of family planning by couples

Percent distribution of currently married nonsterilised women who know a contraceptive method by the number of times family planning was discussed with their husbands in the year preceding the survey, according to background characteristics, Pakistan 1990-91

Background characteristic	Number of times family planning discussed				Number of women
	Never	Once or twice	Three or more times	Total	
Age					
15-19	83.4	14.0	2.6	100.0	277
20-24	75.7	19.8	4.6	100.0	776
25-29	72.8	21.9	5.2	100.0	1112
30-34	69.4	25.2	5.4	100.0	906
35-39	68.8	24.7	6.6	100.0	684
40-44	76.0	18.6	5.4	100.0	568
45-49	84.4	13.3	2.3	100.0	406
Residence					
Total urban	63.2	27.9	9.0	100.0	1619
Major city	59.4	29.3	11.3	100.0	944
Other urban	68.5	25.9	5.6	100.0	676
Rural	79.7	17.4	2.9	100.0	3109
Province					
Punjab	71.7	24.3	4.0	100.0	2889
Sindh	74.6	18.9	6.5	100.0	1054
NWFP	82.6	10.6	6.8	100.0	689
Balochistan	77.1	19.3	3.6	100.0	97
Education level attended					
No education	78.5	18.1	3.3	100.0	3569
Primary	69.5	23.7	6.8	100.0	495
Middle	53.0	40.6	6.4	100.0	241
Secondary +	53.6	30.9	15.5	100.0	423
Total	74.0	21.0	5.0	100.0	4729

6.2 Attitudes of Couples Toward Family Planning

Data on attitudes toward family planning were collected by asking women whether they and their husbands approved or disapproved of couples using a method to delay or avoid pregnancy. Table 6.2 presents information on the extent of consensus between women's attitudes and those of their husbands. It should be noted that the husbands' actual attitudes (reported in Chapter 12) may differ from their wives' perceptions of their attitudes. However, a wife's perception concerning her husband's attitude is important as it affects her decision with regard to the use of family planning.

Table 6.2 Attitudes of couples toward family planning

Percent distribution of wives' approval of family planning by their perception of their husbands' attitude toward family planning, among currently married nonsterilised women who know of a contraceptive method, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Woman approves			Woman disapproves					
	Both approve	Husband dis-approves	Husband's attitude unknown	Husband approves	Husband's attitude unknown	Both disapprove	Other	Total	Number of women
Age									
15-19	33.3	10.5	17.4	2.6	19.6	15.3	1.2	100.0	277
20-24	35.6	11.0	13.9	2.3	12.3	23.9	0.9	100.0	776
25-29	34.3	12.6	18.9	2.1	12.3	19.3	0.4	100.0	1112
30-34	33.1	14.9	12.4	1.6	12.1	25.5	0.4	100.0	906
35-39	39.3	13.0	12.7	2.5	10.9	21.3	0.3	100.0	684
40-44	31.6	10.7	14.8	2.9	15.7	23.5	0.7	100.0	568
45-49	27.6	12.8	14.1	1.0	18.3	26.0	0.2	100.0	406
Residence									
Total urban	52.9	12.6	11.4	1.6	5.1	16.1	0.4	100.0	1619
Major city	59.4	11.8	10.5	2.0	3.0	12.7	0.5	100.0	944
Other urban	43.8	13.7	12.6	0.9	8.0	20.9	0.2	100.0	676
Rural	24.3	12.4	16.8	2.4	17.8	25.6	0.6	100.0	3109
Province									
Punjab	35.6	12.7	14.4	2.4	11.8	22.5	0.6	100.0	2889
Sindh	36.2	12.8	10.3	1.8	15.4	23.2	0.4	100.0	1054
NWFP	25.8	10.7	25.5	1.6	16.7	19.3	0.4	100.0	689
Balochistan	24.0	14.3	8.4	1.0	18.6	32.2	1.5	100.0	97
Education level attended									
No education	27.1	12.6	15.6	2.3	16.6	25.3	0.6	100.0	3569
Primary	43.2	11.9	15.3	2.5	5.6	21.2	0.3	100.0	495
Middle	55.4	18.2	14.3	0.8	2.7	8.5	--	100.0	241
Secondary +	70.3	9.1	9.8	1.2	2.1	7.2	0.3	100.0	423
Total	34.1	12.5	15.0	2.1	13.4	22.4	0.5	100.0	4729

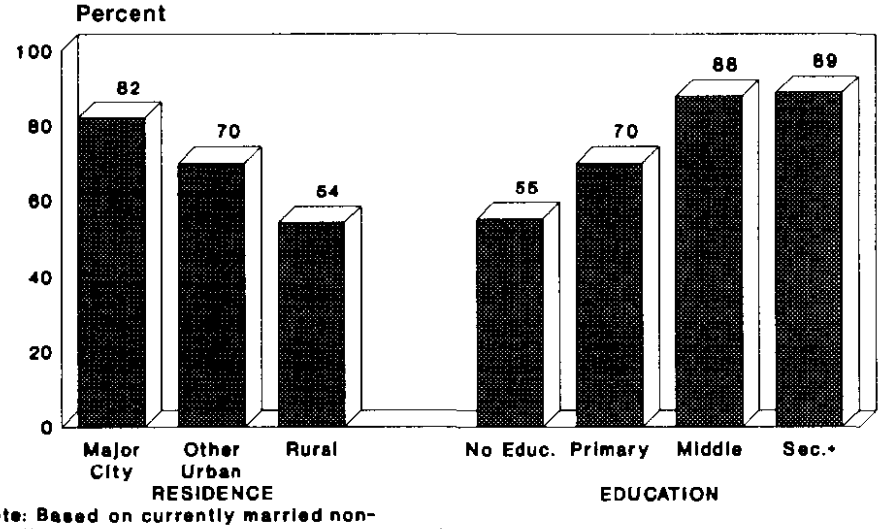
-- Less than 0.05 percent

Table 6.2 shows that 62 percent of currently married, nonsterilised women who knew of a contraceptive method approved of family planning use, while 38 percent disapproved of it. Women perceived their husbands to be somewhat less favourable toward family planning. While 28 percent of women said they did not know their husband's attitude, half of the rest thought their husband disapproved of family planning. There appears to be a considerable amount of consensus between husbands and wives about family planning use. One-third of female respondents reported that both they and their husbands approved of family planning and 22 percent said they both disapproved. The latter couples constitute the hard core cases in which family planning acceptance seems unlikely, unless concerted motivational efforts are made to bring about an attitudinal change. Only 15 percent of women reported an opposite opinion to that of their husbands, and in such cases the husband was usually reported to have a less favourable attitude toward family planning.

Attitudes toward family planning use differ little by the age of the wife. However, urban women are more likely than rural women to approve of family planning (see Figure 6.1). The approval of family planning by both husband and wife was more than twice as high (53 percent) in urban than in rural areas (24 percent). Conversely, disapproval by both husbands and wives was higher in rural areas (26 percent) than in urban areas (16 percent). Rural women were less likely to know their husband's attitude than urban women, a fact which is consistent with the lower level of communication about family planning in rural areas.

Considering family planning approval by province, about 60 percent of women in Sindh, Punjab, and NWFP approved of family planning use, compared with only 47 percent of women in Balochistan. The highest proportion of disapproval by both husband and wife was reported in Balochistan (32 percent), followed by Sindh and Punjab (23 percent each) and NWFP (19 percent).

Figure 6.1
Approval of Family Planning among Currently Married Women by Residence and Education



Note: Based on currently married non-sterilized women age 15-49 who know a method.

PDHS 1990-91

Education of women is a crucial variable which is related to the approval of family planning by both husband and wife. Overall, only 55 percent of uneducated women approved of family planning compared with 89 percent of women with secondary education. Approval by both husband and wife was the lowest (27 percent) among women with no formal education. As education increased, the proportion of women who reported that both they and their husbands approve of the use of family planning increased from 43 percent in the case of primary education to 55 percent in the case of middle school and 70 percent for secondary and higher education.

6.3 Family Planning Messages on Electronic Mass Media

The Population Welfare Programme (PWP), keeping in view the low literacy rate—particularly among females—and the rural residence of most of the population, has utilised the electronic mass media to publicise family planning messages. For more than six years, the PWP has been regularly using radio and television to promote the concept of a small family norm and to disseminate information on family planning, maternal and child health, and breastfeeding. The effort to spread family planning information through the electronic mass media has succeeded in reaching only one in five ever-married women (21 percent) at the national level (see Table 6.3). One in twenty women (5 percent) had heard a family planning message only on radio and the same proportion had seen a message only on television. About one in nine women (11 percent) had heard a message on both radio and television in the month preceding the survey. This indicates that the electronic media have yet to play a major role in disseminating the family planning message to a large segment of the illiterate and rural population.

Table 6.3 Family planning messages on radio and television

Percent distribution of ever-married women by whether they have heard a family planning message on the radio or television in the month preceding the survey, according to background characteristics, Pakistan 1990-91

Background characteristic	Heard family planning message on radio or on television				Total	Number of women
	Neither	Radio only	Television only	Both		
Residence						
Total urban	60.6	3.3	12.6	23.4	100.0	2019
Major city	53.7	2.8	14.6	28.8	100.0	1151
Other urban	69.7	4.0	10.1	16.3	100.0	868
Rural	86.7	5.9	1.9	5.4	100.0	4592
Province						
Punjab	81.6	5.1	4.7	8.6	100.0	3948
Sindh	68.1	5.1	7.7	18.9	100.0	1529
NWFP	80.7	5.4	4.2	9.5	100.0	878
Balochistan	90.0	4.8	0.8	3.3	100.0	255
Education level attended						
No education	84.4	5.5	3.0	7.0	100.0	5237
Primary	62.7	4.9	10.1	22.2	100.0	601
Middle	61.0	4.8	12.2	22.0	100.0	288
Secondary +	47.8	1.0	18.4	32.7	100.0	485
Total	78.7	5.1	5.2	10.9	100.0	6611

Urban-rural differentials in media coverage were quite prominent. One of eight rural women (13 percent) had heard a family planning message on radio or television compared to two of five urban women (39 percent). In major cities, close to half of the women (46 percent) had heard a family planning message on radio or television during the preceding month.

Among the provinces, a larger proportion of women (32 percent) in the comparatively more urbanised province of Sindh had heard a family planning message, followed by NWFP (19 percent) and

Punjab (18 percent). Women in Balochistan were least likely to have heard family planning messages (10 percent), probably because of the low population density and the relatively low level of coverage by mass media.

Exposure to family planning messages through the electronic mass media was positively correlated with educational attainment. Only 16 percent of the uneducated respondents reported that they had heard a family planning message on radio or television, whereas more than half (52 percent) of the women with secondary education had heard a message. The proportion hearing a message on radio alone declined with increasing education and the proportion hearing a message on TV or on both radio and TV increased with increasing education.

Table 6.4 Perceived effectiveness of mass media messages on use of family planning

Percent distribution of the perceived effectiveness of family planning messages in persuading couples to use family planning, among ever-married women who have heard a radio or television message about family planning, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Perceived effectiveness				Total	Number
	Effective	Not effective	Don't know	Missing		
Age						
15-19	69.9	10.0	19.9	0.2	100.0	85
20-24	81.9	10.4	7.3	0.4	100.0	233
25-29	81.0	9.2	8.9	1.0	100.0	343
30-34	81.4	8.4	7.6	2.7	100.0	242
35-39	81.7	9.5	8.7	0.2	100.0	236
40-44	80.6	8.9	8.3	2.2	100.0	150
45-49	72.6	12.7	13.3	1.4	100.0	112
Residence						
Total urban	84.5	9.8	4.9	0.7	100.0	795
Major city	87.1	7.8	4.6	0.5	100.0	532
Other urban	79.2	14.0	5.6	1.2	100.0	263
Rural	74.0	9.2	15.1	1.7	100.0	606
Province						
Punjab	82.0	7.1	9.8	1.1	100.0	724
Sindh	79.5	12.3	6.7	1.5	100.0	486
NWFP	76.0	9.3	14.3	0.4	100.0	168
Balochistan	51.1	33.2	14.5	1.2	100.0	23
Education level attended						
No education	74.9	11.7	12.2	1.2	100.0	811
Primary	87.8	6.8	5.2	0.2	100.0	224
Middle	85.5	4.1	8.1	2.3	100.0	112
Secondary +	86.7	7.8	4.2	1.2	100.0	253
Total	79.9	9.6	9.3	1.2	100.0	1401

Table 6.4 presents the views of ever-married women about the effectiveness of the family planning media messages they heard on radio or saw on television. Eighty percent of the women who heard a message reported that these messages were effective, while 10 percent reported that they were not effective and 9 percent did not know. The differentials in perceived effectiveness by various social and demographic characteristics were generally small. The youngest women (15-19 years) and the oldest women (45-49 years)

were less likely to find the messages effective than women at other ages. Rural women were less likely to find the family planning messages effective. Women in Balochistan and women with no education were least likely to rate the messages as effective.

6.4 Acceptability of Family Planning Messages on Electronic Mass Media

Women were further asked whether or not they considered it acceptable for family planning information to be provided on radio or television. Slightly less than half (48 percent) of the women said that these messages were acceptable to them, while 20 percent said they were not acceptable and the rest (32 percent) were not sure. Younger women, rural residents, women with no education, and women in Balochistan were less likely than other women to think it was acceptable to broadcast family planning messages on radio or television (see Table 6.5). Attitudes toward the acceptability of family planning messages on the electronic mass media are highly favourable among women living in major cities and among women who have gone beyond primary school.

Table 6.5 Acceptability of media messages on family planning

Percentage of ever-married women who believe that it is acceptable to have messages about family planning on radio or television, by age and selected background characteristics, Pakistan 1990-91

Background characteristic	Age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Total urban	66.4	72.0	77.1	77.2	77.1	72.9	62.0	73.9
Major city	67.3	81.7	84.2	81.8	82.9	78.5	74.1	80.9
Other urban	65.4	57.7	66.8	72.2	67.9	65.5	48.9	64.6
Rural	33.3	37.6	36.5	36.0	37.5	38.4	38.5	36.9
Province								
Punjab	39.3	51.1	52.8	52.9	54.8	54.0	50.5	51.9
Sindh	38.2	49.9	49.6	47.3	53.0	38.2	42.2	47.0
NWFP	49.9	35.9	40.3	38.8	42.8	44.0	40.8	41.0
Balochistan	12.8	20.7	23.5	28.6	35.0	18.3	16.2	23.6
Education level attended								
No education	33.2	36.9	37.3	40.2	44.8	42.6	41.2	39.7
Primary	59.1	75.6	76.9	62.5	72.7	71.3	81.1	71.7
Middle	72.6	92.0	89.4	91.6	84.9	84.3	74.1	87.3
Secondary+	82.7	79.4	90.4	91.3	87.0	88.1	91.3	88.0
Total	39.6	47.5	49.0	49.0	52.0	48.5	46.0	48.2

6.5 Intentions About Future Use of Contraception

Information on intentions to use contraception in the future can assist family planning administrators in reaching prospective users and providing them with contraceptives of their choice. Similarly, information on method preference and the reasons for nonuse is helpful in planning future strategies and improving the

operational modalities of the family welfare programme. Such information also provides an estimate of the potential demand for family planning services in the country.

In the PDHS, all currently married pregnant women and non-pregnant women who were not using contraception at the time of interview were asked about their future intentions regarding the use of family planning and their method preference if they intended to use. If they did not intend to use family planning at any time in the future, they were asked why they did not intend to use. Seven of 10 (71 percent) currently married nonusers reported they do not intend to use contraception in the future (see Table 6.6). One of six (16 percent) said that they would use in the future and 13 percent were not sure about their intentions. Seven of 10 of the intended users (69 percent) said they would use contraception within the next 12 months, one-quarter (25 percent) reported they would use at a later stage, and 7 percent were not sure when they would start using contraception.

Table 6.6 Future contraceptive use

Percent distribution of intentions to use family planning in the future by past experience with contraception, among currently married women who are not currently using any contraceptive method, according to number of living children, Pakistan 1990-91

Intention	Number of living children[1]								Total
	0	1	2	3	4	5	6	7+	
Never used contraception									
Intends use within 12 months	0.3	3.6	6.4	6.6	7.5	9.3	9.9	13.8	7.1
Intends use later	4.7	3.9	1.9	2.7	2.6	2.0	0.9	1.4	2.6
Intends - unsure time	0.3	1.3	1.0	0.9	1.5	0.4	0.4	0.7	0.8
Unsure as to intent	13.9	12.7	13.1	14.1	10.7	11.4	8.5	10.7	12.0
Does not intend use	80.1	75.5	70.2	63.7	62.9	61.6	65.2	59.4	67.3
Previously used contraception									
Intends use within 12 months	--	0.6	2.1	4.0	5.7	7.1	4.7	5.3	3.6
Intends use later	--	0.6	0.9	3.1	1.4	1.8	1.2	1.2	1.3
Intends - unsure time	--	--	0.2	0.2	0.4	0.3	0.7	--	0.2
Unsure as to intent	--	0.2	0.8	0.8	1.9	0.7	1.9	0.9	0.9
Does not intend use	0.7	1.5	3.4	3.7	5.4	5.6	6.5	6.4	4.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Currently married nonusers									
Intends use within 12 months	0.3	4.2	8.4	10.6	13.3	16.3	14.6	19.0	10.7
Intends use later	4.7	4.5	2.8	5.8	4.0	3.7	2.1	2.7	3.9
Intends - unsure time	0.3	1.3	1.2	1.1	1.9	0.7	1.1	0.7	1.1
Unsure as to intent	13.9	12.9	13.9	15.0	12.5	12.1	10.4	11.6	12.9
Does not intend use	80.8	77.1	73.6	67.4	68.3	67.1	71.7	65.7	71.4
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	601	853	744	808	737	578	498	792	5610

-- Less than 0.05 percent
[1] Includes current pregnancy

The proportion of women who intend to use does not indicate a consistent trend by parity, although women with three or fewer children are less likely to express an intention to use family planning in the future. Among women who never used contraceptive methods before, three-quarters reported that they did not intend to use in the future. In contrast, a majority of those who used in the past (but are not currently using) intended to use contraception again in the future.

6.6 Reasons for Nonuse of Contraception

Currently-married women who do not intend to use contraception in the future were asked to indicate the main reason for their intentions. The largest proportion of women (43 percent) said they did not intend to use contraception since they wanted more children (see Table 6.7). This reason was given by nearly two-thirds (64 percent) of women less than 30 years of age, but only one-quarter of women age 30 and over.

Table 6.7 Reasons for not intending to use contraception

Percent distribution of main reasons for not intending to use contraception, among non-contracepting currently married women who do not intend to use in the future, according to age, Pakistan 1990-91

Reason for not intending to use contraception	Age		Total
	15-29	30-49	
Wants children	64.0	24.6	42.7
Lack of knowledge	7.4	13.2	10.5
Husband opposed	5.4	7.3	6.4
Costs too much	0.3	0.8	0.6
Worry about side effects	2.1	3.3	2.8
Health concerns	0.5	2.4	1.5
Hard to get methods	0.5	1.1	0.8
Religion	9.9	16.0	13.2
Opposed to family planning	1.0	2.1	1.6
Fatalistic	2.5	3.7	3.1
Other people opposed	0.3	0.1	0.2
Infrequent sex	0.7	1.1	1.0
Difficult to get pregnant	1.8	11.9	7.3
Menopausal/had hysterectomy	--	8.3	4.5
Inconvenient	--	0.3	0.2
Other	1.5	2.3	1.9
Don't know	2.1	1.1	1.6
Total	100.0	100.0	100.0
Number	1842	2162	4005

-- Less than 0.05 percent

Religious reasons were cited by the next largest group of women (13 percent), followed by lack of knowledge about family planning (11 percent). Although Pakistani society is considered to be male dominated, relatively few women (6 percent) mentioned their husband's opposition to the adoption of family planning methods as the main reason they do not intend to use contraception. The proportion of women with a fatalistic attitude (3 percent) was less than might be expected. A significant proportion of older women reported their actual or perceived sterility as the main reason for not intending to use contraception in the future.

6.7 Preferred Future Method of Contraception

Among the women who reported their intention of using contraception in the future, one of six (17 percent) reported female sterilisation as their preferred method of contraception (see Table 6.8). Less than half (45 percent) said they preferred to use modern spacing methods: injection (16 percent), the pill (13 percent), condoms (10 percent), and the IUD (7 percent). About one-quarter of these respondents did not know what method they preferred for future use, 4 percent mentioned traditional methods (2 percent periodic abstinence and another 2 percent withdrawal), while 8 percent gave other answers. Almost none of the respondents indicated male sterilisation or vaginal methods as their preferred method.

Table 6.8 Preferred method of contraception for future use

Percent distribution of preferred contraceptive method among currently married non-contracepting women who intend to use in the future, according to intended timing of future use, Pakistan 1990-91

Preferred method of contraception	Intend to use: In next 12 months	Intend to use: After 12 months	Total
Pill	14.5	12.0	13.0
IUD	8.7	3.6	6.8
Injection	17.5	14.6	15.7
Diaphragm/Foam/Jelly	0.3	--	0.2
Condom	10.4	9.5	9.5
Female sterilisation	18.9	14.1	17.1
Periodic abstinence	2.4	1.9	2.1
Withdrawal	1.5	3.4	1.9
Other	7.9	5.2	7.6
Don't know/missing	17.9	35.7	25.9
Total	100.0	100.0	100.0
Number	602	217	878

Note: Total includes 59 women who intend to use in the future, but who are unsure when they will use.
-- Less than 0.05 percent

The choice of preferred methods was generally similar for those who intended to use within 12 months and for those who intended to use later, although the women in the latter group were less likely to state a preference for any specific method. Overall, a sizeable number of women did not know what method they would prefer to use. This suggests that method-specific knowledge needs to be disseminated to enable women to make informed choices about the use of various methods.

REFERENCE

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CHAPTER 7

PROXIMATE DETERMINANTS OF FERTILITY

Zeba Sathar and Tauseef Ahmed

Analyses of reproductive behaviour cannot omit the important role of factors related to exposure to the risk of pregnancy. The traditional social structure of Pakistan largely supports a natural fertility regime in which the majority of women do not use any means of fertility regulation. Especially in such populations, other proximate determinants of fertility are more crucial in influencing fertility levels. An inquiry into these determinants and their patterns is important in examining the course of sociodemographic change. Previous studies of the proximate determinants of fertility in Pakistan have pointed toward age at marriage and duration of breastfeeding as extremely important variables in this particular cultural context (Karim 1990, Khan 1991, Sathar 1984). Of equal significance are postpartum amenorrhoea and sexual abstinence which lead to insusceptibility to the risk of pregnancy. These factors are also closely associated with fertility patterns, especially in the early months after a birth. This chapter examines patterns and trends in all of the intermediate variables for which data were collected in the PDHS, to highlight their effect on fertility levels in Pakistan.

7.1 Marriage Patterns and Trends

All ever-married women interviewed in the PDHS were asked to give their age at the time they started cohabiting with their husbands. Probing was used to differentiate the *nikah* (the marriage contract ceremony) from the actual *rukhsati* (the departure for the husband's household, i.e., consummation of the marriage). It is not until cohabitation begins that women are considered to be exposed to the risk of pregnancy. The length of time women are exposed directly affects overall fertility; for example, a later age at marriage for females would result in a shorter period of exposure to childbearing (provided other factors are equal). Thus, any change in marriage patterns that results in later age at marriage for women can play an important role in reducing fertility, particularly in a country like Pakistan, which has a low level of contraceptive prevalence.

In the PDHS, only 25 percent of women age 15-19 and 60 percent of women age 20-24 had ever been married (see Table 7.1). Once marriages were entered into, however, they tended to remain quite stable. Less than one percent of women were divorced or separated at the time of the survey and less than two percent were widowed. The fact that marriage is a social obligation and nearly universal in Pakistan is supported by the finding that 98 percent of women age 35-49 had married.

A comparison of the proportion of women who had never been married derived from the PDHS and the 1979-80 PLM indicates that substantial changes in marriage patterns took place between the two surveys. Although the proportion of women never married rose for every age group, the changes are particularly striking at ages 20-29, which has traditionally been the peak childbearing period for women in Pakistan.

Changes in marriage patterns over time are also evident from an examination of changes in the singulate mean age at marriage (SMAM). The singulate mean age at marriage computed from various sources for males and females is presented in Table 7.2. The SMAM for females has risen by five years during the last three decades (from 16.7 years in 1961 to 21.7 years in 1990-91). The SMAM for males rose by three years over the same period.

Table 7.1 Current marital status

Percent distribution of women by current marital status, according to age, 1990-91 PDHS and 1979-80 PLM

	1990-91 PDHS							1979-80 PLM
Age	Never married	Married	Divorced	Widowed	Separated	Total	Number	Percent never married
15-19	75.1	24.3	--	0.3	0.2	100.0	1720	72
20-24	39.4	59.6	0.6	0.1	0.7	100.0	1747	23
25-29	14.4	83.2	0.2	1.0	1.3	100.0	1745	6
30-34	4.3	92.4	0.5	1.5	1.2	100.0	1241	3
35-39	2.4	92.7	0.5	4.0	0.4	100.0	1005	2
40-44	2.4	92.8	0.1	4.2	0.5	100.0	865	1
45-49	2.1	90.8	0.2	6.5	0.5	100.0	630	1
Total	26.2	71.1	0.2	1.8	0.7	100.0	8953	32

-- Less than 0.05 percent
Source: Sathar, Ali and Zahid (1984)

Table 7.2 Mean age at marriage

Singulate mean age at marriage for selected sources 1951-1991, Pakistan

Source	Male	Female	Difference
1951 Census	22.3	16.9	5.4
1961 Census	23.3	16.7	6.6
1972 Census	25.7	19.7	6.0
1981 Census	25.1	20.2	4.9
1976 PGS	25.2	20.0	5.2
1988 PDS	24.9	20.6	4.3
1990-91 PDHS	26.5	21.7	4.8

Table 7.3 shows the distribution of ever-married women by the proportion married by particular ages. Early marriage (before age 15) has never been prevalent, but it occurs even less frequently among the youngest age groups. The proportion married by age 18 or age 20 has also declined sharply when comparing women age 30-34 to those age 20-24. The median age at marriage for each of the five-year age groups from age 25-49 indicates very little variation for different cohorts. This apparent lack of change is partly due to the fact that the median cannot be calculated for women under age 25 since the majority have not yet been married. The median age at marriage, however, will necessarily be higher than 20 years for women who are currently in the 20-24 age group.

Table 7.3 Age at first marriage

Percentage of women ever-married by exact age 15, 18, 20, 22, and 25, and median age at first marriage, according to current age, Pakistan 1990-91

Current age	Percentage ever-married by exact age: 15	18	20	22	25	Percent never married	Number	Median age
15-19	7.3	NA	NA	NA	NA	75.1	1720	a
20-24	11.4	31.6	48.9	NA	NA	39.4	1747	a
25-29	16.5	42.3	58.4	70.1	82.1	14.4	1745	18.9
30-34	17.0	47.8	63.1	74.3	87.7	4.3	1241	18.2
35-39	16.3	43.4	60.5	75.0	88.3	2.4	1005	18.6
40-44	18.0	44.8	60.9	75.9	87.7	2.4	865	18.5
45-49	16.3	40.7	57.4	68.9	81.9	2.1	630	18.8
20-49	15.5	41.0	57.4	NA	NA	14.5	7233	18.9

NA = Not applicable
[a]Less than 50 percent of women in the age group were married by the beginning of the age group.

Differentials in Age at Marriage

Table 7.4 presents differentials in the median age at marriage for various groups of women. Overall, for women age 25-49, the median age at marriage is 18.6 years. This figure is slightly higher in urban areas (19.1 years) than in rural areas (18.4 years). Among Pakistan's four provinces, the median age is highest in NWFP and Punjab and substantially lower in Balochistan and Sindh. Finally, there is a positive association between the median age at marriage for women and their educational attainment: women with no education marry four years earlier, on average, than women with secondary or higher education.

Table 7.4 Median age at first marriage

Median age at first marriage among women age 25-49 years, by current age and background characteristics, Pakistan 1990-91

Background characteristic	Current age					Women
	25-29	30-34	35-39	40-44	45-49	25-49
Residence						
Total urban	19.9	19.1	18.7	19.2	18.3	19.1
Major city	20.1	19.4	18.5	18.8	18.5	19.2
Other urban	19.5	18.4	18.9	20.1	17.8	19.0
Rural	18.4	18.0	18.6	18.3	19.0	18.4
Province						
Punjab	19.4	18.5	19.0	18.9	19.0	19.0
Sindh	17.5	17.2	17.6	16.5	16.0	17.1
NWFP	19.5	18.6	19.0	18.9	20.8	19.3
Balochistan	16.8	17.7	18.3	18.2	21.9	17.7
Education level attended						
No education	18.2	17.8	18.4	18.4	18.8	18.3
Primary	19.1	19.1	18.6	17.7	(16.9)	18.7
Middle	20.6	18.4	(17.9)	a	(19.6)	18.9
Secondary +	22.9	23.3	21.5	21.6	(20.0)	22.5
Total	18.9	18.2	18.6	18.5	18.8	18.6

Note: Figures in parentheses are based on 25 to 49 unweighted cases.
[a]Based on fewer than 25 unweighted cases, median not shown

Ideal Age at Marriage

The PDHS included questions asking ever-married women about what they considered to be the ideal age at marriage for women. The median ideal age at marriage was 18.4 years (see Table 7.5). Although ages 20-21 were considered ideal by the largest percentage of women (23 percent), more than one-quarter said it is ideal for a woman to get married at age 15 or earlier. There is a strong positive association between the stated ideal age at marriage and the actual age at which women got married. Nevertheless, most women who got married at a relatively young age (under 18) report an ideal age at marriage that is greater than their own age at marriage. Overall, the wide range of responses suggests that there is no consensus about what the *ideal* age at marriage is for women in Pakistan, despite a trend toward increasing age at marriage for females over the last three decades.

Table 7.5 Ideal age at marriage for women

Percent distribution of ever-married women by ideal age at marriage for women and median ideal age at marriage, according to actual age at first marriage, Pakistan 1990-91

Ideal age at first marriage for women	Actual age at first marriage							Total
	< 15	15	16-17	18-19	20-21	22-23	24+	
< 15	21.8	11.0	8.6	6.9	6.6	7.3	7.7	10.6
15	21.1	22.8	16.4	15.3	11.2	14.2	10.3	16.4
16-17	13.8	15.4	18.0	13.5	15.5	13.7	9.5	14.6
18-19	14.1	18.5	18.6	25.0	19.3	18.8	19.9	19.2
20-21	17.1	18.8	24.5	26.2	28.0	22.9	27.2	23.3
22-23	2.2	3.7	5.0	5.0	7.2	8.5	5.6	4.9
24 +	5.0	6.2	5.6	5.1	8.2	8.0	15.0	6.9
Non-numeric response	5.0	3.5	3.2	3.0	3.9	6.7	4.9	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1245	782	1302	1252	852	558	620	6611
Median age	16.4	17.1	18.3	18.6	18.8	18.7	20.0	18.4

Marriage Between Relatives

One of the most salient aspects of marriage patterns in Pakistan is the frequency of marriage between blood relatives (i.e., consanguineous marriages). There is some evidence that cousin marriage may affect both fertility and the health of children. For example, Bittles et al. (1992) found that unions between close biological relatives in Pakistan were characterised by higher fertility as well as higher mortality among the offspring of such marriages. Shami and Zahida (1982) found significantly higher pregnancy wastage and longer first birth intervals in consanguineous marriages.

Data on marriage between relatives are shown in Table 7.6 and Figure 7.1. It should be noted that such data have not previously been available for Pakistan at the national level. The PDHS presents documented evidence of the widespread prevalence of cousin marriage in Pakistan. Sixty-one percent of all marriages are consanguineous unions between first or second cousins; this is one of the highest rates reported anywhere in the world (Bittles 1990; Bittles et al. 1991). First cousin marriages occur more frequently on the father's side (30 percent), but are also common on the mother's side (21 percent).

There is a negative association between current age and marriage between relatives. The incidence of consanguineous marriage is higher among younger couples than older ones. More specifically, women age 35 and above are more likely to have married nonrelatives than women under age 35. It appears, therefore, that the traditional pattern of cousin marriage continues to be adhered to on a wide scale.[1] The continued popularity of cousin marriage may be related to the increasing size of dowries. Some parents may not be able to afford a large dowry, but if a daughter marries her cousin, the size of the dowry may be smaller and the dowry can be kept within the family. Further investigation of this phenomenon is needed.

[1] It should be noted, however, that the greater proportion of consanguineous marriages among younger women may partially reflect the fact that such marriages are more common for women who marry at younger ages. The percentage of consanguineous marriages for the younger age cohorts may decline over time as more women in those cohorts get married.

Table 7.6 Marriage between relatives

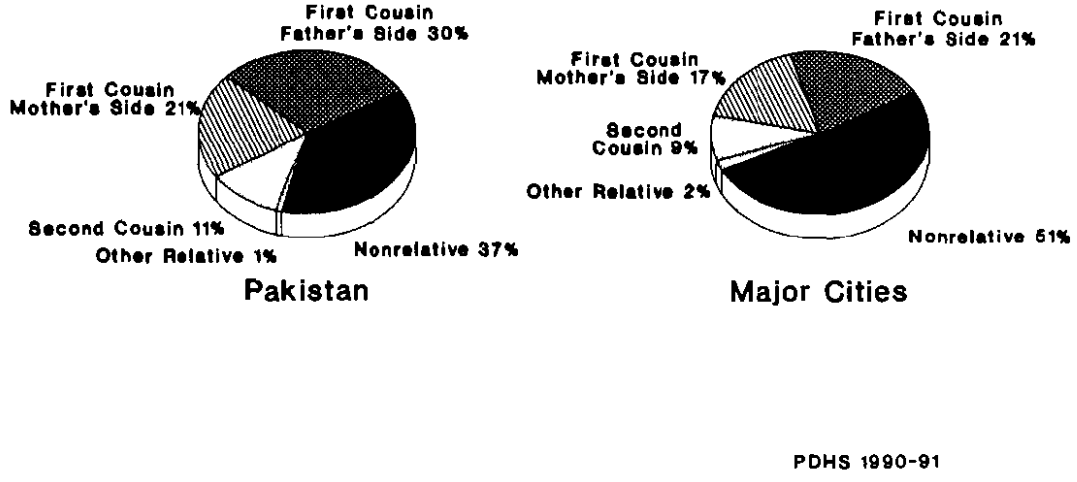
Percent distribution of ever-married women by relationship to their husbands, according to background characteristics, Pakistan 1990-91

Background characteristic	First cousin		Second cousin	Other relation	Not related	Missing	Total	Number
	Father's side	Mother's side						
Age								
15-19	31.4	24.6	11.8	1.9	30.2	0.1	100.0	428
20-24	34.9	21.2	8.4	1.0	34.6	--	100.0	1059
25-29	30.6	20.2	10.5	0.9	37.6	0.1	100.0	1494
30-34	27.8	21.1	13.7	1.1	35.8	0.6	100.0	1187
35-39	26.5	20.6	10.2	1.7	40.9	0.1	100.0	981
40-44	29.2	18.9	11.2	2.6	38.1	--	100.0	844
45-49	27.2	19.2	10.9	1.7	41.0	--	100.0	617
Age at marriage								
< 15	33.8	22.2	8.7	1.1	33.9	0.4	100.0	1245
15	36.1	21.2	13.2	1.8	27.5	0.2	100.0	782
16-17	30.2	23.1	10.3	0.9	35.3	0.1	100.0	1302
18-19	28.2	17.3	11.7	1.0	41.8	--	100.0	1252
20-21	28.7	19.7	9.1	2.4	39.8	0.2	100.0	852
22-23	26.1	19.1	9.8	1.8	43.1	--	100.0	558
24 +	20.3	20.7	15.6	1.7	41.8	--	100.0	620
Residence								
Total urban	22.8	18.2	10.3	1.8	46.7	0.3	100.0	2019
Major city	21.0	16.6	9.2	2.0	50.8	0.5	100.0	1151
Other urban	25.2	20.3	11.8	1.5	41.2	--	100.0	868
Rural	32.8	21.6	11.2	1.3	33.0	0.1	100.0	4592
Province								
Punjab	29.8	23.2	10.9	1.4	34.6	0.2	100.0	3948
Sindh	33.3	16.4	9.9	1.4	38.8	0.2	100.0	1529
NWFP	22.1	16.2	12.7	1.2	47.8	--	100.0	878
Balochistan	33.9	20.5	10.8	2.7	31.6	0.4	100.0	255
Education level attended								
No education	31.2	21.3	10.6	1.4	35.4	0.1	100.0	5237
Primary	29.7	19.2	14.4	1.8	34.7	0.3	100.0	601
Middle	23.1	20.0	10.0	1.5	45.3	--	100.0	288
Secondary +	18.0	14.5	10.8	1.3	55.1	0.3	100.0	485
Total	29.7	20.6	10.9	1.4	37.2	0.2	100.0	6611

-- Less than 0.05 percent

Women who marry at an early age are more likely to marry cousins. For example, cousin marriages were contracted by 67 percent of women who got married before age 16 compared to 57 percent of women who got married at age 18 or above. There is also a clear relationship between residence and consanguinity. Women residing in major urban areas are least likely to have married a cousin, and those living in rural Pakistan are most likely to have done so. The difference is more pronounced for marriage with a cousin from the father's side, indicating stronger adherence to the traditional marriage pattern in rural areas. Rural residents may also have a greater desire to keep the dowry on the father's side of the family. Consanguineous marriages are relatively less popular in NWFP, although even in that province a majority of women marry a close relative.

Figure 7.1
Marriage Between Relatives and Between Nonrelatives among Ever-Married Women 15-49, Pakistan and Major Cities



As expected, more educated women tend to marry nonrelatives more often than women with no education. In fact, women with a secondary or higher education and those living in major cities are more likely to marry a nonrelative than a relative. These results are supported by the findings of a survey in Karachi which found that women who were educated or employed were less likely to have married relatives (Sathar and Kazi 1988). With the exception of the pattern across age groups, which reflects a trend toward more consanguineous unions over time, all other factors indicate that more modern women are less likely to enter consanguineous unions. Women who marry later, those who are exposed to urban influences and those who are more educated are less likely to marry relatives.

Polygyny

Another factor which has thus far been undocumented is the extent of polygynous marriages in Pakistan. Polygyny is legal in Pakistan, although according to the Muslim Family Laws Ordinance promulgated in 1961, the husband needs to obtain written permission from his first wife to marry a second wife. Even though polygyny is legal, less than five percent of currently married women reported that their husbands had more than one wife (Table 7.7). Only 0.2 percent of women reported that their husbands had more than two wives (data not shown). The prevalence of polygynous marriages is low in all groups, with the highest proportion found in the 45-49 age group, especially in rural areas. Among the provinces, polygynous unions are most common in Balochistan (12 percent) and least common in Punjab (3 percent). Not surprisingly, female education shows a negative association with polygyny, but an erratic pattern is evident in some age groups due to the small number of cases.

Table 7.7 Polygyny

Percentage of currently married women in a polygynous union, by age and selected background characteristics, Pakistan 1990-91

Background characteristic	Age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Total urban	2.1	2.5	3.2	2.3	3.3	4.1	2.3	2.9
Major city	2.1	2.7	2.9	1.9	3.1	4.0	0.7	2.6
Other urban	2.1	2.1	3.7	2.8	3.6	4.1	3.9	3.2
Rural	3.7	4.1	5.0	4.8	5.2	3.9	11.4	5.2
Province								
Punjab	1.6	2.4	1.1	2.6	3.4	1.7	7.7	2.6
Sindh	8.6	6.0	7.5	7.6	5.0	7.3	6.2	6.8
NWFP	2.5	3.8	9.0	3.5	7.4	8.0	11.8	6.6
Balochistan	7.3	7.1	17.6	5.6	7.6	10.3	27.2	12.1
Education level attended								
No education	3.5	4.3	5.3	4.5	4.5	3.8	9.2	4.9
Primary	0.8	2.0	2.5	2.1	10.2	4.7	6.3	3.7
Middle	--	2.7	1.1	1.1	--	3.9	6.5	1.7
Secondary +	10.5	--	1.7	3.2	0.7	5.6	--	2.3
Total	3.4	3.6	4.5	4.0	4.5	3.9	8.7	4.5
Number	418	1041	1452	1147	932	803	572	6364

-- Less than 0.05 percent

7.2 Breastfeeding and Postpartum Infecundibility

Breastfeeding has a negative effect on fertility through the mechanism of lactational infecundibility. Since the majority of women in Pakistan have traditionally breastfed their children for fairly long periods of time, lactational infecundibility has helped to keep fertility in check. Declines in the period of lactation in Pakistan would lead to shorter birth intervals and to an increase in fertility unless other factors compensate for its effects.

Breastfeeding

The PDHS provides an opportunity to assess whether the prevalence and length of breastfeeding are declining in Pakistan. More than half (57 percent) of children under three years of age were being breastfed at the time of the survey (see Table 7.8). More than 80 percent of children were being breastfed during the first year of their lives. In the second year of life, breastfeeding declines rapidly, but 42 percent of children were still being breastfed in the last two months of their second year of life. On average, Pakistani mothers breastfeed their children for 20 months, which is slightly less than the mean duration of 22 months estimated in the 1975 PFS for surviving children (Shah 1984). Breastfeeding is usually supplemented at an early age

Field Survey Teams

Karachi-I:
Mr. Shahid Hussain (Supervisor, FBS)
Ms. Naila Qureshi (Field Editor)
Ms. Syedia Atia Fasih (Interviewer)
Ms. Rukhsana Yasmin (Interviewer)
Syeda Kashfadduja (Interviewer)
Mr. Asif Maqbool Khan (Interviewer)
Mr. M. Ashraf (Driver)
Mr. M. Allah Rakhio (Driver)

Karachi-II:
Mr. Qamar A. Khan (Supervisor, FBS)
Ms. Shahida Yaqoob (Field Editor)
Ms. Seema (Interviewer)
Ms. Mehrunnisa (Interviewer)
Ms. Asia Masood Khan (Interviewer)
Mr. Mohammad Sarwar (Interviewer)
Mr. Bashir Ahmad (Driver)
Mr. Dur Mohammad (Driver)

Hyderabad:
Mr. Gul Mohammad Balooch (Supervisor, FBS)
Ms. Shahida Soomro (Field Editor)
Ms. Salma Panhwar (Interviewer)
Ms. Farah Naz Rashidi (Interviewer)
Ms. Shahzadi Bilqees (Interviewer)
Mr. Sajid Hassan Fazlani (Interviewer)
Mr. M. Ilyas (Driver)

Sukkur:
Mr. Wahid Buksh (Supervisor, FBS)
Mr. Amanullah Bhatti (Supervisor, NIPS)
Ms. Shahida Balooch (Field Editor)
Ms. Rubina Rahat (Interviewer)
Ms. Naghma Nazli (Interviewer)
Ms. Naveeda Khan Abbasi (Interviewer)
Mr. Tariq Ahmad Qureshi (Interviewer)
Mr. Lal Bux (Driver)

Quetta:
Mr. Taj Mohammad (Supervisor, FBS)
Mr. Shahid Munir (Supervisor, NIPS)
Ms. Rehana Abbass (Field Editor)
Ms. Shabana Nisar (Interviewer)
Ms. Kalsum Akhtar (Interviewer)
Ms. Bushra Parveen (Interviewer)
Mr. Ghulam Haider Balooch (Interviewer)
Mr. Gul Mohammad (Driver)

Khuzdar:
Mr. Mohammad Anwar Arain (Supervisor, FBS)
Ms. Roqaya (Field Editor)
Ms. Fauzia Tabassum (Interviewer)
Ms. Sajida Nasreen (Interviewer)
Ms. Razia Faqir (Interviewer)
Mr. Mohammad Akbar Balooch (Interviewer)
Mr. Abdur Rashid (Driver)

Lahore-I:
Mr. Amar Hameed Butt (Supervisor, FBS)
Mr. Shahid Munir (Supervisor, NIPS)
Ms. Ms Sughra Bibi (Field Editor)
Ms. Ms Salma Raees (Interviewer)
Ms. Farah Deeba (Interviewer)
Ms. Seema Iqbal (Interviewer)
Mr. Muzakar Ahmad (Interviewer)
Mr. Abdul Saeed (Driver)

Lahore-II:
Ms. Nasim Sajid (Supervisor, FBS)
Ms. Lubna Rashid (Field Editor)
Ms. Shahida Parveen (Interviewer)
Ms. Saeeda Parveen (Interviewer)
Ms. Dilshad Tahir (Interviewer)
Mr. Raza Hassan (Interviewer)
Mr. Ghulam Qamar (Driver)

Rawalpindi:
Mr. Imtiaz Ahmad Awan (Supervisor, FBS)
Mr. Saba Nazir (Field Editor)
Ms. Shahida Kiyani (Interviewer)
Ms. Nasira Jamila (Interviewer)
Ms. Shagufta Cheema (Interviewer)
Syed Hasnat Ahmad (Interviewer)
Mr. Ifkhtiar Ahmed (Driver)

Multan:
Mr. A. D. Pathan (Supervisor, FBS)
Ms. Shabana Anjum (Field Editor)
Ms. Farhat Kausar (Interviewer)
Ms. Rehana Naureen (Interviewer)
Ms. Farhana Naureen Khan (Interviewer)
Mr. Jamil Mehmood (Interviewer)
Mr. Allah Rakha (Driver)

Sargodha:
Mr. Abdul Qayum (Supervisor, FBS)
Ms. Sajida Naheed (Field Editor)
Ms. Shabana Shehnaz (Interviewer)
Ms. Samina Amir (Interviewer)
Ms. Tahira Yasmin (Interviewer)
Mr. Iftikhar Qamar (Interviewer)
Mr. Gul Nawaz (Driver)

Abbottabad:
Mr. Masood Anwar (Supervisor, FBS)
Ms. Shazia Naureen (Field Editor)
Ms. Naushaba (Interviewer)
Ms. Saira Jabeen Jehangeri (Interviewer)
Ms. Lubna Shirin (Interviewer)
Mr. Zahir Jamil Khan (Interviewer)
Mr. Hamayoon Khan (Driver)

less than 30 years of age have a median duration of amenorrhoea that is four months shorter than older women. Rural women have a median duration that is twice as long as urban women. Education is negatively associated with the duration of amenorrhoea: women with at least some secondary education have a median duration of amenorrhoea of 3.1 months compared to 7.9 months for women with no education. Table 7.9 also shows wide differentials for provinces. Women in Sindh and Balochistan experience only five months of amenorrhoea, while the median is six months in Punjab and nine months in NWFP. For postpartum abstinence, there are only small differences in the median values, and the differentials in insusceptibility follow closely the pattern of differentials in amenorrhoea.

Two indicators of the termination of exposure to the risk of childbearing are shown in Table 7.10. The first indicator concerns fecundity as measured by evidence of menopause. The lack of a menstrual period for six months among women who are neither pregnant nor postpartum amenorrhoeic is taken as evidence of menopause and therefore infecundity. Only two percent of women in their thirties have already reached menopause. By the mid-forties (age 44-45), nearly one-quarter of women are menopausal and the proportion increases rapidly in the late forties.

Table 7.10 Termination of exposure to the risk of pregnancy

Indicators of menopause and infertility among currently married women 30-49 years of age, by age, Pakistan 1990-91

Age	Menopause[1]	Infertility[2]
30-34	1.7	15.3
35-39	2.1	22.8
40-41	10.1	42.0
42-43	12.8	49.6
44-45	22.8	64.4
46-47	41.1	67.3
48-49	60.8	85.6
Women 30-49	11.8	34.8

[1]Percentage of non-pregnant, non-amenorrhoeic currently married women whose last menstrual period occurred six or more months preceding the survey or who report that they are menopausal.
[2]Percentage of currently married women in their first union of six or more years' duration, never having used contraception, who did not have a birth in the six years preceding the survey and who are not pregnant.

The second indicator is a crude measure of infertility, based on the number of women who have not had a birth in the six years preceding the survey and who were not pregnant at the time of the survey. Since the survey does not include a complete history of marriage and contraceptive use, the figures are based only on women in their first union of six or more years' duration who have never used contraception. Even in their early thirties, nearly one in every six of these women is estimated to be infertile. The infertility rate rises rapidly for women in their forties, from 42 percent of women age 40-41 to 86 percent of women age 48-49. By age 44-45, nearly two-thirds of women are estimated to be infertile.

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CHAPTER 8

FAMILY SIZE PREFERENCES

Syed Mubashir Ali and Abdul Razzaque Rukanuddin

This chapter examines women's preferences concerning family size and the gender of their children. The analysis is based on responses of ever-married women of reproductive age to questions about: (a) whether the respondent wants more children, and if so, how long she would prefer to wait before the next child, and (b) if she were to start afresh, how many children she would want. Pregnant women were asked about their desire for additional children after the one they were expecting; thus, they were treated as if they had already reached the next parity.

In order to ascertain the extent of sex preference, two additional questions were asked. One gathered information on the preferred sex of the next child and the other on the ideal number of children by sex. Two other issues examined were the frequency of unwanted or mistimed births and the effect that the prevention of such births would have on fertility rates. Answers to these questions provide an assessment of the need for family planning services.

Do family size preferences play an important role in accounting for actual reproductive behaviour? Demographers differ on the empirical application of this attitudinal construct. Although some have agreed that these responses are useful in predicting future fertility in developed countries, they believe that the responses may not be meaningful in developing countries (Hauser 1967; Lightbourne and MacDonald 1982; Westoff and Ochoa 1991).

The critics argue that the responses to questions on fertility preferences reflect unformed, ephemeral views which are held with little conviction. Moreover, they believe that the responses do not take into account the effect of social pressures or the attitudes of other family members, particularly the husband, who may exert a major influence on reproductive decisions.

In Pakistan, where the contraceptive prevalence rate is still low (12 percent) and other social pressures, particularly from the woman's husband and mother-in-law apparently have an influence on reproductive decisions, the criticisms may hold true to some extent. However, a comparison of husbands' and wives' attitudes about family size in the PDHS showed that their responses are quite similar (see Chapter 12). Moreover, many demographers are of the opinion that the responses to the questions on fertility preferences could be of practical value provided the questions are correctly framed and presented (Gay 1971; Ware 1974). Farooq (1981) suggests that in developing countries where the contraceptive prevalence rate is low, observed fertility may not reflect the actual demand for children, but family size preferences would.

8.1 Desire for Children

This section examines the potential need for contraceptive services for spacing as well as limiting births. Such a need is ascertained by the responses of currently married women who want either to space their next birth or to cease childbearing altogether.

The majority of currently married women want to stop having children or want to delay the next birth (see Table 8.1 and Figure 8.1). This indicates that there is a general awareness of the need to regulate the level of fertility and a willingness to do so. More than one-third (36 percent) of women reported that they wanted no more children at all in the future. An additional 18 percent said that they wanted to wait at least

Table 8.1 Fertility preferences by number of living children

Percent distribution of currently married women by desire for more children, according to number of living children, Pakistan 1990-91

Desire for more children	Number of living children[1]								Total
	0	1	2	3	4	5	6	7+	
Have another soon[2]	77.8	38.4	27.3	19.0	12.8	7.6	5.3	3.1	22.5
Have another later[3]	7.2	40.9	32.9	23.4	14.2	8.4	4.8	1.9	17.6
Another undecided when[4]	--	1.4	3.2	1.7	1.4	0.4	0.4	0.5	1.2
Undecided	4.6	4.7	1.0	2.3	1.7	2.4	1.4	0.5	2.3
Up to Allah	4.4	8.1	15.2	14.7	15.8	14.7	15.0	14.8	13.1
Want no more	1.6	3.8	15.6	33.8	46.6	58.9	62.4	66.4	36.4
Sterilised	--	--	1.0	1.9	5.0	4.4	8.7	7.8	3.6
Declared infecund	4.1	2.5	3.2	3.0	2.0	3.2	2.1	4.8	3.1
Missing	0.2	0.2	0.5	0.1	0.5	--	--	0.3	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	602	880	830	910	883	694	601	963	6364

-- Less than 0.05 percent
[1]Includes current pregnancy
[2]Wants next birth within two years
[3]Wants next birth after two or more years
[4]Includes timing up to Allah and other non-numeric responses

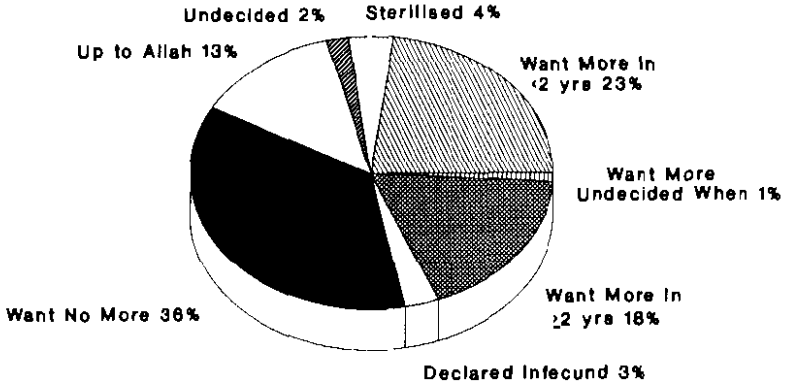
two years before having another child. In other words, a majority of women can be considered to be potentially in need of family planning services. Only 23 percent of women wanted another child within two years. Moreover, 13 percent indicated that the decision was "up to Allah." An analysis of the 1984-85 PCPS (data not shown) indicated a pattern of preferences similar to that found in the 1990-91 PDHS.

The continuing importance accorded to childbearing in Pakistan is evident from the PDHS data. Among all childless women, 85 percent definitely want children and nine-tenths of the women desiring children want a child within two years. However, the proportion who want another child within two years drops sharply to 38 percent for women already having one child. Thereafter, the desire to bear additional children within two years decreases gradually as the number of living children increases.

As shown in Table 8.1 and Figure 8.2 the proportion of women who do not want more children was strongly associated with the number of living children. Although large family size norms continue to prevail in Pakistan, about one-half (52 percent) of women at parity four and almost three-quarters (71 percent) of women at parity six want to stop childbearing.[1]

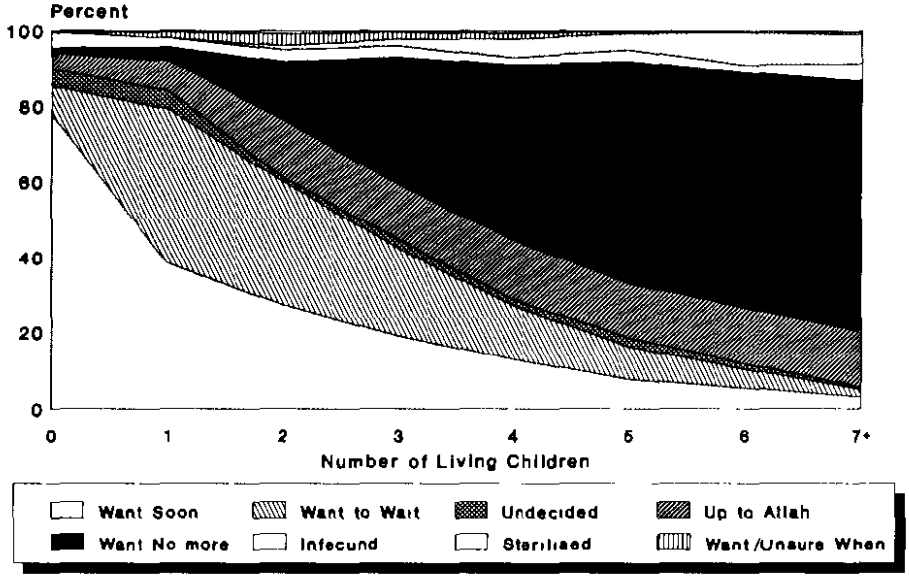
[1] These figures include sterilised women who make up 5 percent of women at parity four and 9 percent of women at parity six.

Figure 8.1
Fertility Preferences among Currently Married Women 15-49



PDHS 1990-91

Figure 8.2
Fertility Preferences among Currently Married Women 15-49 by Number of Living Children



PDHS 1990-91

A fatalistic approach to childbearing is evident among a small minority of women. About 13 percent of women stated that the decision about whether or not to have another child is up to Allah. Only two percent of women are undecided about having another child. Therefore, a large majority of women were able to estimate their preferences with regard to future childbearing.

Table 8.2 presents the percent distribution of currently married women by their desire for children according to age. Since age and the number of living children are highly correlated variables, future fertility preferences by age closely follow the pattern already observed between future fertility preferences and the number of living children in Table 8.1.

Table 8.2 Fertility preferences by age

Percent distribution of currently married women by desire for more children, according to age, Pakistan 1990-91

Desire for more children	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon[1]	43.0	34.3	26.7	23.9	12.5	10.5	6.0	22.5
Have another later[2]	35.7	35.8	24.5	13.6	7.0	1.8	1.1	17.6
Another undecided when[3]	0.9	1.6	1.4	1.4	1.4	0.3	0.5	1.2
Undecided	7.6	2.2	3.1	1.8	1.2	0.9	0.8	2.3
Up to Allah	8.9	11.2	15.5	16.2	13.3	10.8	10.0	13.1
Want no more	3.3	11.7	26.2	37.9	55.1	62.0	61.8	36.4
Sterilised	--	0.5	0.9	2.8	8.1	8.0	6.8	3.6
Declared infecund	0.5	2.4	1.7	2.1	1.1	5.4	12.4	3.1
Missing	0.2	0.3	--	0.3	0.3	0.2	0.5	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	418	1041	1452	1147	931	803	572	6364

-- Less than 0.05 percent
[1]Wants next birth within two years
[2]Wants next birth after two or more years
[3]Includes timing up to Allah and other non-numeric responses

The desire to stop having children increases with age and the desire to space births decreases with age. In other words, the potential need for family planning services is greatest among older women for limiting children and among younger women for spacing births. The total potential need is greatest for women age 35 and over. However, even among women in their twenties about half want to either stop childbearing or delay their next birth for two or more years.

Table 8.3 presents the percentage of currently married women who want no more children by the number of living children and selected background characteristics. This table reveals that a higher proportion of women in urban than in rural areas want no more children (52 and 35 percent respectively). This differential becomes more prominent when rural women are compared with the women living in major cities. The differential in preferences between major cities and other urban areas disappears for women with six or more children. By the time they have had six or more children, more than four of five urban women want to stop childbearing, whether they live in major cities or other urban areas.

Table 8.3 Desire to stop having children

Percentage of currently married women who want no more children, by number of living children and selected background characteristics, Pakistan 1990-91

Background characteristic	Number of living children[1]								Total
	0	1	2	3	4	5	6	7+	
Residence									
Total urban	0.8	4.5	28.7	55.0	66.4	76.8	84.7	82.3	52.3
Major city	1.0	6.5	33.2	59.3	72.1	79.5	84.8	82.2	54.3
Other urban	0.5	2.0	20.8	49.1	58.6	73.4	84.5	82.5	49.7
Rural	2.0	3.5	10.8	27.3	44.7	57.0	64.7	70.4	34.6
Province									
Punjab	1.7	3.8	17.6	40.8	60.4	71.8	81.4	83.1	44.4
Sindh	1.6	3.8	15.4	33.0	39.5	54.8	62.3	63.6	35.8
NWFP	1.9	4.7	19.2	26.6	41.7	54.1	62.2	72.0	36.7
Balochistan	--	0.1	0.5	2.8	15.7	10.8	21.0	24.1	9.2
Education level attended									
No education	2.0	3.2	13.4	30.0	46.6	58.7	68.5	72.6	38.2
Primary	--	8.9	9.6	39.4	52.8	78.0	80.2	82.6	42.2
Middle	1.2	0.8	35.7	59.9	67.9	61.5	89.1	91.2	47.9
Secondary +	1.3	5.4	37.4	59.6	84.2	91.0	98.7	97.4	50.9
Total	1.7	3.8	16.6	35.8	51.5	63.3	71.1	74.2	39.9

Note: Women who have been sterilised are considered to want no more children.
-- Less than 0.05 percent
[1]Includes current pregnancy

Among the provinces, women in Punjab have the strongest preference to stop childbearing (44 percent want no more children), followed by NWFP (37 percent) and Sindh (36 percent). Balochi women indicated the least potential demand for fertility control, since only 9 percent said they did not want more children.

There is an inverse association between educational level and the percentage of women who want no more children. While only 38 percent of uneducated women want to stop childbearing, the corresponding proportion was 48 percent for women with middle level education and 51 percent for those with secondary or higher education. These educational differentials were also evident among women classified by their existing number of children. The largest differential in percentage terms was found for women at parity four where the difference between the largest figure (for women who have secondary or higher education) and the smallest figure (for those having no education) is 38 percentage points. Even among women with no education, however, nearly half want to stop bearing children after they have had four children.

8.2 Sex Preference for Children

Previous studies in Pakistan have found a strong preference for sons among married couples (Ali 1989a,b; Sathar 1987; Miller 1984; DeTray 1984). The desire to have more sons than daughters is an outcome of the value attached to sons for socioeconomic and cultural reasons. In rural areas, sons are valued for the help they provide for parents on farms. Sons in general are desired for carrying forward the family name and providing security for their parents during old age.

The PDHS results confirm that there is a continuing preference for sons in Pakistan (see Table 8.4). Yet nearly half of all women who want another child say that the sex of the next child does not matter to them. Among those who prefer a child of a particular sex, however, ten times as many prefer a son to a daughter. Among childless women, more than two-thirds do not have a preference about the sex of their first baby. This is consistent with the fact that social pressures in Pakistan place demands on a newly married woman to prove her fertility by producing a child, rather than specifically giving birth to a son. Among women who already have children, the proportion who desire a son for the next child increases with the number of daughters in the family. Moreover, a very strong desire for a son is observed among women with two or more children all of whom are daughters. Almost all (at least 92 percent) of these women want a son for their next birth. Among women with two or more children without a daughter, at most three-fifths (57 percent) at any parity wish for a daughter. In general, an increasingly large percentage of respondents with at least one daughter showed no preference regarding the sex of the next child as the number of sons increased.

Table 8.4 Preferred sex of next child

Percent distribution of preferred sex for the next child among currently married non-pregnant women who want another child, according to number of living children and sons, Pakistan 1990-91

Number of living children and sons	Preferred sex				Total	Number
	Male	Female	Does not matter	Missing		
No children	31.7	0.2	67.6	0.5	100.0	512
One child	49.5	4.3	46.2	--	100.0	548
No sons	78.6	--	21.4	--	100.0	268
One son	21.6	8.5	69.9	--	100.0	280
Two children	47.5	11.0	41.5	--	100.0	417
No sons	93.0	--	7.0	--	100.0	105
One son	44.4	--	55.6	--	100.0	192
Two sons	12.7	38.1	49.2	--	100.0	120
Three children	63.9	7.0	29.1	--	100.0	329
No sons	91.9	--	8.1	--	100.0	67
One son	78.7	0.1	21.2	--	100.0	141
Two sons	34.4	5.7	60.0	--	100.0	90
Three sons	(21.2)	(57.2)	(21.6)	(--)	(100.0)	31
Four children	62.8	6.4	30.6	0.2	100.0	193
No sons	100.0	--	--	--	100.0	25
One son	95.4	--	4.0	0.5	100.0	74
Two sons	(44.3)	(--)	(55.7)	(--)	(100.0)	47
Three or more sons	(9.8)	(26.3)	(63.8)	(--)	(100.0)	47
Five children	59.3	4.5	36.2	--	100.0	175
Less than two sons	95.8	--	4.2	--	100.0	69
Two or three sons	46.9	3.0	50.0	--	100.0	70
Four or more sons	(13.8)	(15.7)	(70.5)	(--)	(100.0)	37
Total	49.1	5.2	45.6	0.1	100.0	2174

Note: Figures in parentheses are based on 25 to 49 unweighted women.
-- Less than 0.05 percent

8.3 Need for Family Planning

Table 8.5 presents estimates for the unmet, met and total need for family planning services by selected background characteristics.[2] More than one-quarter of currently married women were found to have an unmet need for family planning services (11 percent for birth spacing and 18 percent for limiting births).

Table 8.5 Need for family planning services

Percentage of currently married women with unmet need for family planning, met need for family planning, and total demand for family planning services, by selected background characteristics, Pakistan 1990-91

Background Characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning			Percentage of demand satisfied	Number of women
	Unmet need for spacing	Unmet need for limiting	Total unmet need	Met need for spacing	Met need for limiting	Total met need	Demand for spacing	Demand for limiting	Total demand		
Age											
15-19	23.2	1.5	24.7	2.3	0.3	2.6	25.5	1.8	27.3	9.4	418
20-24	19.3	5.1	24.5	4.1	2.2	6.3	23.5	7.3	30.8	20.5	1041
25-29	14.5	13.4	27.9	3.1	6.5	9.6	17.6	20.0	37.6	25.6	1452
30-34	8.4	20.6	28.9	2.2	11.2	13.4	10.6	31.7	42.3	31.6	1147
35-39	5.0	30.1	35.1	0.8	19.6	20.4	5.8	49.7	55.5	36.7	931
40-44	1.6	30.8	32.4	0.1	15.7	15.8	1.7	46.5	48.2	32.8	803
45-49	0.5	17.2	17.8	--	11.8	11.8	0.5	29.1	29.6	40.0	572
Residence											
Total urban	11.3	18.0	29.3	4.8	20.9	25.7	16.1	39.0	55.1	46.7	1930
Major city	11.0	17.5	28.5	6.8	24.2	31.0	17.8	41.6	59.5	52.1	1098
Other urban	11.7	18.8	30.5	2.1	16.7	18.8	13.8	35.5	49.3	38.2	832
Rural	10.1	17.3	27.5	0.9	4.9	5.8	11.0	22.3	33.3	17.4	4434
Province											
Punjab	11.4	19.0	30.5	2.2	10.9	13.0	13.6	29.9	43.5	29.9	3768
Sindh	9.0	14.9	23.9	2.8	9.7	12.4	11.7	24.6	36.3	34.2	1486
NWFP	10.1	19.4	29.6	0.7	7.8	8.6	10.9	27.2	38.1	22.5	856
Balochistan	6.2	5.1	11.4	0.9	1.1	2.0	7.1	6.2	13.3	14.9	254
Education level attended											
No education	9.6	18.3	27.8	0.8	6.9	7.8	10.4	25.2	35.6	21.8	5044
Primary	15.2	14.9	30.1	3.4	14.4	17.8	18.6	29.3	47.8	37.2	573
Middle	15.8	15.0	30.8	7.6	21.9	29.5	23.4	36.9	60.3	48.9	279
Secondary +	11.3	14.8	26.1	10.2	27.8	38.0	21.5	42.6	64.0	59.3	468
Total	10.5	17.6	28.0	2.1	9.8	11.8	12.5	27.3	39.9	29.7	6364

-- Less than 0.05 percent

[1] *Unmet need for spacing* refers to: pregnant women whose pregnacy was mistimed, amenorrhoeic women whose last birth was mistimed, and women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who say they want to wait two or more years for their next birth. *Unmet need for limiting* refers to: pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who want no more children. Excluded from the category of unmet need are menopausal and infertile women, defined in footnotes 1 and 2 in Table 7.10.

[2] *Met need for spacing* refers to: women who are using some method of family planning and who say they want to wait two or more years for their next child. *Met need for limiting* refers to: women who are using a method and who want no more children.

[2] See the footnotes for Table 8.5 for definitions of the concepts used in this section.

Those who were practicing family planning methods (12 percent of currently married women) were considered to have a met need for family planning. Among these women only two percent were practicing family planning for spacing purposes.

Assuming that the women's intentions are true, the contraceptive prevalence rate could be increased to 40 percent if all women in need of family planning services actually used contraception. Presently, less than one-third of the stated need is being met.

The overall unmet need for family planning increases with age up to age 35-39 and decreases thereafter. The unmet need for spacing of births was highest among younger women, whereas the unmet need for limiting births was highest among women age 35-44. Younger women were least likely to have their need for family planning services satisfied. Only 9 percent of currently married women age 15-19 had their demand for family planning services satisfied, compared to 40 percent of women age 45-49.

The unmet need for family planning is nearly the same in urban and rural areas, but urban-rural differentials are quite pronounced for current use of contraception. This results in large differentials by place of residence in the percentage of demand that is satisfied. More than half of the overall demand for family planning is satisfied in major cities compared to only 17 percent of demand in rural areas.

The largest proportion of women with both met and unmet need live in Punjab Province. In contrast, women in Balochistan revealed a minimal need for family planning services, primarily because they are less motivated to curtail childbearing. The level of unmet need for family planning varies little among women in various education categories. But the number of women using family planning services increases sharply with the level of education.

8.4 Ideal Family Size

In the PDHS, the ideal family size is estimated from responses to two questions. Women who had no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" For women who had children, the question was rephrased as follows: "If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?" Although many women found this type of hypothetical question difficult to answer, the results are informative.

Table 8.6 presents the distribution of ever-married women by their ideal number of children and parity. Three-fifths of women stated that the number of children that is ideal for them is up to Allah. The magnitude of such responses is unprecedented in previous national demographic surveys in Pakistan and is also high compared to the results of DHS surveys conducted in 30 other countries so far.

It is not in the scope of this report to present a thorough investigation of the causes of the high proportion of such responses. However, there are a number of possible explanations. The question on ideal family size (particularly for women who already had children) is phrased in such a manner that the respondent is required to perform the difficult task of thinking abstractly and independently of her actual family size. In view of the high level of illiteracy among women, such questions may be difficult for many women to answer.

Older women with many children may be reluctant to mention a smaller family size as an ideal for fear that some of their existing children may die. In fact, in Table 8.6 a larger percentage of women with large families were found to leave the decision up to Allah in response to the question on ideal family size. This finding may also be associated with cultural conservatism among older women.

Table 8.6 Ideal number of children

Percent distribution of ideal number of children among ever-married women, and mean ideal number of children for ever-married women (EMW) and for currently married women (CMW), according to number of living children, Pakistan 1990-91

Ideal number of children	Number of living children[1]								Total
	0	1	2	3	4	5	6	7+	
0	0.3	--	0.2	--	--	--	--	--	0.1
1	--	0.4	0.7	0.3	0.2	--	--	--	0.2
2	7.2	7.4	10.1	3.9	3.7	3.5	3.8	1.4	5.1
3	6.6	8.8	7.5	13.9	3.2	4.8	4.5	3.3	6.7
4	16.9	17.3	19.8	18.9	26.7	13.8	15.4	13.7	18.0
5	3.9	3.1	3.1	2.9	3.6	7.4	2.5	2.9	3.6
6	2.3	2.4	2.3	2.1	4.2	3.7	7.7	3.9	3.5
7+	2.9	1.8	1.4	1.9	1.3	0.9	1.6	3.9	2.0
Up to Allah	58.5	58.1	54.6	55.7	56.4	65.5	64.3	69.8	60.2
Other non-numeric	1.3	0.7	0.3	0.4	0.6	0.5	0.2	0.9	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	640	928	870	947	907	709	620	990	6611
EMW mean ideal	3.9	3.9	3.6	3.8	4.2	4.2	4.4	4.8	4.1
Ever-married women	257	382	392	415	390	242	220	289	2587
CMW mean ideal	4.0	3.9	3.6	3.8	4.2	4.2	4.4	4.8	4.1
Currently married women	249	368	379	405	386	236	213	283	2519

Note: Means are calculated excluding women giving non-numeric responses.
-- Less than 0.05 percent
[1]Includes current pregnancy

Among women who gave a numerical answer for their ideal family size, the ideal number of children for both ever-married and currently married women is 4.1 children, on average. The average ideal number of children and the actual number of children ever born (CEB) are found to be identical in the PDHS (see Table 4.8 for the average CEB). The average ideal family size is considerably smaller in the PDHS than in previous surveys: 1984-85 PCPS (4.9 children), 1979-80 PLM (4.6 children), and 1975 PFS (4.2 children) [Ali 1989a]. The smaller ideal family size reported in the PDHS, compared to the PCPS, is consistent with the observed decline in the estimated TFR between the two surveys.

Women with fewer than four children had a smaller number of children than their ideal number, whereas the pattern is the opposite for women at parity four or more. Overall, 18 percent of women consider four children as the ideal family size. This was the most popular family size expressed by women at every parity.

Table 8.7 presents the mean ideal number of children for ever-married women by age group and selected background characteristics. The average ideal number of children shows only a small increase with increasing age. The ideal number of children is lower in urban areas (3.7 children) than in rural areas (4.3 children), and is lowest in major cities (3.6 children). An inverse association exists between the ideal number of children and the educational level of women.

Table 8.7 Mean ideal number of children

Mean ideal number of children for ever-married women by age and selected background characteristics, Pakistan 1990-91

Background characteristic	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Total urban	3.4	3.5	3.5	3.9	3.8	4.1	4.3	3.7
Major city	(3.3)	3.3	3.4	3.6	3.7	4.0	4.1	3.6
Other urban	(3.6)	3.7	3.7	4.2	4.1	4.5	(4.7)	4.0
Rural	4.2	4.1	4.4	4.3	4.4	4.7	4.6	4.3
Province								
Punjab	4.1	3.8	3.8	4.1	3.9	4.2	4.5	4.0
Sindh	(3.5)	3.6	4.0	3.8	4.1	5.0	(4.2)	4.0
NWFP	(3.8)	4.1	4.2	4.8	4.3	4.8	4.1	4.3
Balochistan	*	(5.4)	6.3	(6.7)	(7.5)	*	*	6.3
Education level attended								
No education	4.1	4.0	4.2	4.3	4.2	4.8	4.6	4.3
Primary	(4.2)	3.8	4.4	4.0	(3.8)	(4.3)	*	4.0
Middle	*	3.4	3.5	(3.9)	(3.7)	*	*	3.6
Secondary +	*	3.2	3.3	3.5	3.5	3.4	(4.2)	3.4
Total	3.9	3.8	4.0	4.1	4.0	4.5	4.4	4.1

Note: Means are calculated excluding women giving non-numeric responses. Figures in parentheses are based on 25 to 49 unweighted cases.
*Based on fewer than 25 unweighted cases, mean number not shown.

The most prominent departure from the average ideal number of children nationwide is found in the province of Balochistan. The average ideal family size for women in Balochistan (6.3 children) is over two children greater than the national average. A somewhat similar pattern was observed in the 1984-85 PCPS.

8.5 Fertility Planning

In this section, responses to the question, "At the time you became pregnant with (NAME), did you want to become pregnant *then*, did you want to wait until *later* or did you want *no more* children at all?" pave the way for a more direct assessment of the extent of excess fertility and the desire for spacing. This question was asked about every child born in the preceding five years and about the forthcoming expected child for women who were pregnant at the time of survey. Measures based on these questions, however, are not free of limitations. The respondent is required to recall accurately her wishes at one or more points in the last five years and to report them honestly, which may be affected by memory lapse. There is also a danger of rationalization since it is common for an unwanted conception to become a cherished child.

Overall, more than three-fourths of the births were wanted at the time the women became pregnant (see Table 8.8). An additional 13 percent were not wanted at all and eight percent were reported to have occurred earlier than desired. First order births were found to be largely wanted when they occurred. A lack

Table 8.8 Planning status of births

Percent distribution of births (including current pregnancy) in the five years preceding the survey by fertility planning status, according to birth order and mother's age at the time of birth, Pakistan 1990-91

Birth order and mother's age	Planning status of birth: Wanted then	Wanted later	Not wanted	Missing	Total	Number of births
Birth order[1]						
1	94.1	1.9	0.3	3.7	100.0	1366
2	85.2	10.0	2.6	2.2	100.0	1227
3	81.0	12.6	4.3	2.1	100.0	1101
4	78.9	11.8	8.1	1.2	100.0	964
5	72.9	9.4	16.6	1.1	100.0	833
6	66.5	7.9	23.9	1.8	100.0	622
7+	51.8	7.2	38.2	2.8	100.0	1366
Mother's age						
<20	90.5	4.8	1.6	3.2	100.0	832
20-24	84.4	9.7	3.5	2.5	100.0	2205
25-29	77.7	10.2	9.9	2.2	100.0	2049
30-34	67.7	7.6	22.5	2.3	100.0	1365
35-39	60.7	5.8	32.1	1.5	100.0	655
40-44	49.5	6.2	43.4	0.9	100.0	307
45-49	49.6	7.4	41.6	1.4	100.0	65
Total	76.4	8.4	13.0	2.3	100.0	7479

[1]Includes current pregnancy

of awareness and limited availability of family planning services could be responsible for an increase in the incidence of mistimed births after the first birth. The proportion of births not wanted at all surpasses the proportion that were mistimed at the fifth and higher birth orders. A similar pattern of unwanted and mistimed pregnancies is evident for women in different age groups. For women in their thirties, less than two-thirds of pregnancies were desired at the time they occurred. This figure drops below half for women in their forties. More than 40 percent of pregnancies to women in their forties were not wanted at all. These results confirm that there is a substantial unmet need for family planning services in Pakistan.

Table 8.9 presents a comparison between the wanted total fertility rate and the actual total fertility rate (TFR) by background characteristics. The wanted TFR is calculated in exactly the same manner as the conventional TFR, except that births classified as unwanted are omitted from the numerator. A birth is considered unwanted if the number of living children at the time of the pregnancy was greater than or equal to the ideal number of children at the time of the survey, as reported by the respondent.[3] Thus, the wanted TFR

[3] It is assumed that a birth was wanted if the mother's ideal number of children at the time of the survey was less than the number of living children at the time of the pregnancy or if she gave a non-numeric response (e.g., "up to Allah") to the question on ideal number of children.

can be interpreted as the total number of wanted births a woman would bear in her reproductive span if she experienced the wanted age-specific fertility rates prevailing for the past six years. "Wanted fertility rates" express the level of fertility that theoretically would result if all unwanted births were prevented. A comparison of the conventional TFR with the wanted TFR indicates the potential demographic impact of preventing unwanted births.

The wanted TFR was 4.7 children per women for Pakistan as a whole, but it exceeded 5 in rural areas and in Balochistan. The wanted TFR was particularly low (3.3 to 3.6) in Karachi and other major cities. Education is strongly related to the wanted TFR. Women with a primary school education have a wanted TFR that is 1.3 children lower than that of women with no education. Overall, the wanted TFR was 0.7 children or 12 percent lower than the actual TFR. Given the fact that only a small number of births were considered unwanted, the wanted TFR remained quite high—a pattern consistent with the large family size norm prevalent in the country.

The differences between the actual TFR and the wanted TFR were highest for the major cities, implying the prevalence of substantial unwanted fertility in those areas. Major cities also had the highest proportion of women who wanted no more children (see Table 8.3). Although a relatively greater number of educated women live in major cities, where contraceptive services are more available, use of family planning has still not closed the gap between the number of children women are having and their ideal family size.

Table 8.9 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the six years preceding the survey by selected background characteristics, Pakistan 1990-91

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Total urban	3.8	4.9
Major city	3.3	4.7
Other urban	4.5	5.2
Rural	5.1	5.6
Province		
Punjab	4.8	5.4
Sindh	4.4	5.1
Karachi	3.6	5.0
NWFP	4.9	5.5
Balochistan	5.7	5.8
Education level attended		
No education	5.1	5.7
Primary	3.8	4.9
Middle	3.4	4.5
Secondary +	2.9	3.6
Total	4.7	5.4

Note: Rates are based on births to women 15-49 in the period 1-72 months preceding the survey. The total fertility rates are the same as those presented in Table 4.4.

The difference between the two measures was of almost the same magnitude in all provinces except Balochistan, where the difference was negligible. By education group, women with a primary or middle level of education had the highest differentials.

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CHAPTER 9

INFANT AND CHILD MORTALITY

Tauseef Ahmed, Mansoor-ul-Hassan Bhatti and George Bicego

Since independence in 1947, Pakistan has experienced steady but modest declines in rates of mortality at all ages. Yet early childhood mortality remains high. The most recent source of child survival data before the 1990-91 PDHS was the multi-round Pakistan Demographic Survey (PDS), which estimated infant mortality at 110 per thousand live births for the 1984-88 period. The PDHS provides an opportunity to examine infant and child mortality in more detail. Such information is important at this time because of recent efforts by the health sector in Pakistan to address the health problems of infants and young children. Major areas of child survival intervention include: (1) control of diarrhoeal disease, (2) management of acute respiratory infection, (3) the Expanded Programme on Immunisation (EPI), and (4) nutrition. Careful examination of changes in the level of infant and child mortality is essential in assessing whether and to what extent such efforts have been effective.

This chapter focuses on levels, trends, determinants and differentials in the mortality of infants and children under the age of five. An analysis of high-risk fertility behaviour is also presented.

9.1 Definitions of Infant and Child Mortality

All female respondents were asked to provide a complete birth history, including the sex, birth date, survival status, and current age or age at death for each live birth. These data were used to calculate the following direct estimates of infant and child mortality,[1] for three six-year periods (0-5, 6-11, and 12-17) preceding the survey:

Neonatal mortality:	the probability of dying in the first month of life;
Postneonatal mortality:	the difference between infant and neonatal mortality;
Infant mortality ($_1q_0$):	the probability of dying before the first birthday;
Child mortality ($_4q_1$):	the probability of dying between the first and fifth birthday;
Under-five mortality ($_5q_0$):	the probability of dying before the fifth birthday.

[1] A detailed description of the method for calculating the probabilities presented here is given in Rutstein (1984). The mortality estimates are not rates, but are true probabilities, calculated according to the conventional life table approach. For any calendar period, deaths and exposure in that period are first tabulated for the age intervals 0, 1-2, 3-5, 6-11, 12-23, 24-35, 36-47, and 48-59 months. Then age interval specific probabilities of survival are calculated. Finally, probabilities of mortality for larger age segments are produced by multiplying the relevant age interval survival probabilities together and subtracting the product from one:

$$ {}_nq_x = 1 - \prod_{i=x}^{i=x+n} (1-q_i) $$

9.2 Assessment of Data Quality

Rates of infant and child mortality are subject to both sampling and nonsampling errors. This section describes the results of some basic checks for various nonsampling errors; namely, underreporting of early childhood deaths (which would result in underestimates of mortality) and misreporting age at death (which may distort the age pattern of under-five mortality).

Underreporting of deaths is generally more common for children who died shortly after birth than those who died later. If early neonatal deaths are selectively underreported, then an abnormally low ratio of deaths under seven days to all neonatal deaths and an abnormally low ratio of neonatal to infant mortality would be observed. If such underreporting is related to the child's sex or to the length of time preceding the survey, then the ratios would be affected in proportion to the extent of the underreporting. The ratios are given in Table 9.1.

Table 9.1 Indices of early infant deaths

Indices of early infant deaths by sex, for three six-year periods, Pakistan 1990-91

Index	Time period of death (years preceding survey) 0-5	6-11	12-17
Deaths in first 6 days/ all neonatal deaths			
Male	0.64	0.69	0.50
Female	0.62	0.62	0.59
Neonatal deaths/ all infant deaths			
Male	0.59	0.61	0.59
Female	0.55	0.55	0.60

The proportion of neonatal deaths reported to have occurred during the first week of life (0-6 days) varies considerably for males, but little for females. The large jump in the ratio for males between 12-17 years before the survey and 6-11 years before the survey from 0.50 to 0.69 is unusual and suggests that male deaths during the early neonatal period may have been omitted in the earliest period. The ratio of neonatal mortality to infant mortality is comparatively stable for both males and females although further evidence in support of the notion of male omission for the earliest period is found in a slight increase in the male ratio between the two earliest periods, when the female ratio was declining. Since female neonatal mortality is expected to be lower due to greater biological vigour at birth, it is unusual to find a smaller male neonatal/infant ratio for the earliest period.

Table 9.2 Sex differentials in infant and neonatal mortality

Infant and neonatal mortality rates by sex, and sex ratios, for three six-year periods preceding the survey, Pakistan 1990-91

Mortality	Time period of death (years preceding survey) 0-5	6-11	12-17
Infant mortality			
Male	100.9	98.5	101.6
Female	79.7	94.9	113.1
Sex ratio	1.27	1.04	0.90
Neonatal mortality			
Male	59.0	60.2	59.4
Female	43.5	53.1	67.7
Sex ratio	1.36	1.13	0.88

Sex differentials in infant and neonatal mortality over time are presented in Table 9.2. By analysing trends in these differentials, it is possible to examine misreporting of mortality. Normally, there is an excess of male mortality during infancy, especially during the neonatal period. The decreasing ratio of male to female mortality going back in time is striking, and suggests that some early deaths of male children 12-17 years preceding the survey were not reported.[2]

[2] On the other hand, female mortality may have been decreasing at a faster pace than male mortality, which could partially account for the unusual pattern seen here.

This would lead to a bias in the evaluation of trends, since mortality rates 12-17 years preceding the survey will be underestimated relative to mortality in more recent time periods.

A problem common to most retrospective surveys is heaping of age at death on "convenient" digits, e.g., 6, 12, and 18 months. This phenomenon introduces biases in rate calculation, if the net result is to shift deaths from one age segment to another. Thus, heaping at 12 months causes concern because a certain fraction of these deaths, though reported to occur after infancy (i.e., at ages 12-23 months), may have actually occurred during infancy (i.e., at ages 0-11 months). The infant mortality rate ($_1q_0$), in this case, is biased downwards and child mortality ($_4q_1$) upwards.

Table 9.3 presents the distribution of deaths reported at ages 5 to 23 months by reported age at death for three six-year periods preceding the survey. Distinct "heaps" of deaths are evident at 6, 12, and 18 months of age, with corresponding deficits in the adjacent months, although heaping at 12 months occurs only during the most recent period. Digit preference appears not to be serious enough, however, to substantially alter the rates calculated here. For instance, even if as many as half of the deaths reported at "12 months" were reassigned to the infant age segment, infant mortality would be increased and child mortality would be decreased by less than one percent for the period 0-5 years preceding the survey. More troublesome are the large number of deaths reported at "1 year," which results not from digit preference, but from the failure of interviewers to correctly elicit and record the age at death in units of months as required by PDHS survey guidelines for deaths under two years of age.[3] The rates reported here are not adjusted for this defect in the data—which, in effect, assumes that all "1 year" deaths occurred in the 12-23 month segment. In the unlikely event that half of these deaths actually occurred during the infant age segment, the infant mortality rate would be underestimated by less than five percent for each of the three six-year periods. While infant mortality may be slightly underestimated and child mortality overestimated, when age at death is reported as "1 year" (with no adjustment), trend evaluation will not be substantially affected, since there is no marked trend in such reporting.

Table 9.3 Reporting of age at death

Distribution of reported deaths at age 5-23 months by age at death, for three six-year periods preceding the survey, Pakistan 1990-91

Age at death (months)	Time period of death (years preceding survey) 0-5	6-11	12-17
5	16	28	15
6	39	38	22
7	13	21	20
8	18	17	10
9	21	9	24
10	18	21	12
11	9	9	4
12	20	7	5
13	2	0	0
14	1	3	1
15	10	4	3
16	5	0	3
17	2	1	0
18	16	17	10
19	0	0	0
20	0	0	0
21	1	0	1
22	1	0	0
23	0	0	0
1 year[1]	69	61	55

[1]Age at death reported to be 1 year was supposed to be recorded in months.

Unreported age at death is another potential problem in data of this type; however, respondents failed to provide age at death in only 5 (0.2 percent) of the 3,016

[3] It can be argued that these deaths are more likely to be drawn from the 12-23 month age segment than deaths reported at "12 months," which presumably are drawn from both older *and* younger ages (reflected in the deficit at 11 months). This is based on the notion that a report of "1 year" would commonly translate to having reached the first birthday (i.e., one completed year or 12-23 months). Any adjustment procedure that would involve reassigning a fraction of these deaths from the post-infant to infant age segment is, thus, undertaken with a great deal of uncertainty.

deaths reported during the 18 years preceding the survey. In these cases, age at death was imputed using a hot-deck procedure.[4]

In sum, internal consistency checks indicate that the mortality data from the PDHS are of reasonable quality, keeping in mind the sociocultural constraints prevalent in the society. However, with increasing time since the survey, there appears to be an increasing omission of neonatal deaths, especially deaths to boys. The effect of this omission will be to underestimate rates of infant mortality for less recent periods and thus reduce estimates of mortality decline. Also, imprecise reports of ages at death, especially reports of "1 year," may introduce a small downward bias in the estimation of infant mortality and an upward bias in the estimation of child mortality. However, the evaluation of trends in the PDHS would not be affected.

9.3 Levels and Trends in Infant and Child Mortality

Infant and child mortality rates for three six-year periods preceding the PDHS are shown in Table 9.4. The estimated infant mortality rate for the most recent period (0-5 years preceding the survey) is 91 per 1000 live births, with 57 percent of infant deaths occurring in their first four weeks of life.[5] Under-five mortality ($_5q_0$) has fallen 18 percent, from 143 to 117 per thousand in the period from 12-17 years to 0-5 years before the survey. Much of the estimated decline in mortality occurred between the periods 12-17 years and 6-11 years preceding the survey, with a slower rate of decline between the two most recent periods. Disproportionate gains were made in survival among children age 12 to 59 months (28 percent), while neonatal (19 percent) and postneonatal (11 percent) survival have shown more modest improvements. As mentioned previously, the apparently unremarkable change in neonatal mortality may be an artifact of underreporting of neonatal deaths in less recent periods. Still, over half of infant mortality (neonatal plus postneonatal mortality) and 45 percent of under-five mortality occurs during the first month of life (see Figure 9.1). Thus, there exists considerable scope for improving child survival during infancy in Pakistan through programmes designed to improve maternal health and pregnancy outcome.

Table 9.4 Infant and child mortality

Infant and child mortality rates for three six-year periods preceding the survey, Pakistan 1990-91

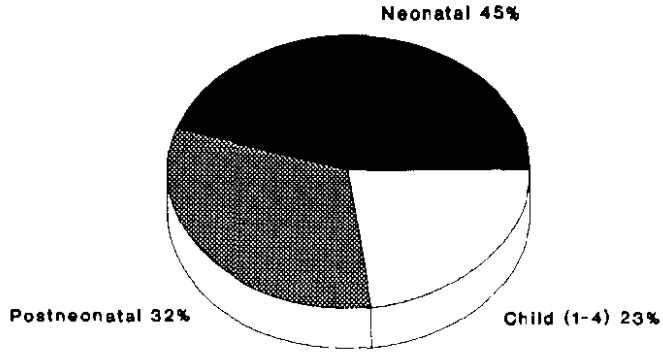
Years preceding survey	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
0-5	51.4	39.1	90.5	29.5	117.4
6-11	56.7	40.0	96.7	29.8	123.6
12-17	63.4	43.7	107.1	40.7	143.5

Note: The month of interview is excluded from the analysis.
[1]Computed as the difference between infant and neonatal mortality

[4] The procedure assigns an age at death equal to that of the last death of the same birth order in the data file.

[5] The estimated infant mortality rate based on births and deaths for a period of 12 complete months preceding the 1984-85 PCPS was 106.

Figure 9.1
Distribution of Deaths
Under Age Five by Age at Death



Note: Based on deaths in the six years preceding the survey.

PDHS 1990-91

9.4 Differentials in Infant and Child Mortality

Table 9.5 presents infant and child mortality rates by urban-rural residence, province of residence, level of mother's education, and use of basic maternal health services. Mortality rates are calculated for a ten-year period so that the rates for each population subgroup are based on an adequate number of events. Under-five mortality ($_5q_0$) is 29 percent lower in urban Pakistan (94 per thousand) than in the rural setting (132 per thousand). The urban-rural differential exists at all ages (see Figure 9.2), which suggests that both social factors and access to health services are important in the greater risk of death among rural children. There is little or no difference in mortality risk between major cities and other urban areas.

Among regions, under-five mortality is lowest in NWFP (98 per thousand) and highest in Punjab (133 per thousand). The higher under-five risk in Punjab is largely due to higher mortality during infancy (104 per thousand). Infant mortality was estimated to be lowest in Balochistan, but this should be interpreted with caution since sampling errors are relatively high in Balochistan, as well as in NWFP. Moreover, the unusually low rate of infant mortality relative to child mortality in Balochistan as well as a deficit of births in the year preceding the survey, suggests that there was selective underreporting of infant deaths in that province.

Child survival chances in Pakistan are closely related to a mother's level of education. Children of mothers with no education experience over two and a half times (159 percent) the level of under-five mortality as children of women educated to the secondary level or higher. Indeed, each incremental change in education is associated with significant gains in survival. In the postneonatal period, a strong education effect is observed only for the secondary and higher level of education.

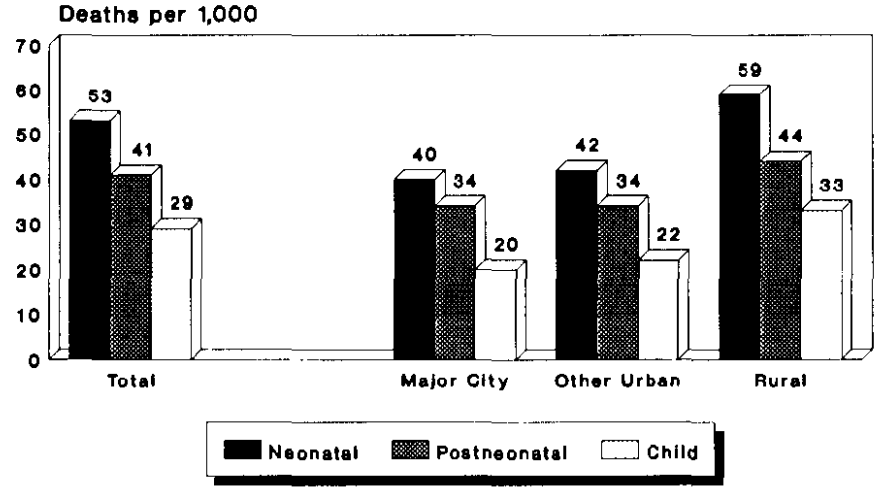
Table 9.5 Infant and child mortality by background characteristics

Infant and child mortality rates for the ten-year period preceding the survey, by background characteristics of the mother, Pakistan 1990-91

Characteristic of mother	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Total urban	40.8	33.8	74.6	20.6	93.6
Major city	39.7	34.1	73.8	19.5	91.9
Other urban	42.1	33.5	75.6	22.0	95.9
Rural	58.6	43.7	102.2	33.0	131.9
Province					
Punjab	58.4	45.7	104.1	32.0	132.8
Sindh	44.4	36.1	80.5	27.3	105.6
NWFP	48.2	31.3	79.6	19.7	97.7
Balochistan	46.1	26.3	72.4	31.0	101.1
Education level attended					
No education	56.1	42.5	98.6	33.1	128.4
Primary	49.8	40.6	90.4	18.3	107.0
Middle	43.5	36.7	80.2	7.9	87.4
Secondary +	26.9	18.9	45.8	3.9	49.5
Medical maternity care[2]					
No antenatal or delivery care	57.1	47.2	104.3	31.6	132.6
Either antenatal or delivery care	32.5	32.4	64.9	40.9	103.1
Both antenatal and delivery care	46.7	22.8	69.5	10.5	79.3
Total	53.3	40.7	94.0	29.2	120.4

Note: The month of interview is excluded from analysis.
[1]Computed as the difference between infant and neonatal mortality
[2]Rates are for the five-year period preceding the survey. Medical care is that given by a doctor, nurse or trained midwife, or received in a hospital, clinic, health centre or health unit.

Figure 9.2
Infant and Child Mortality
by Place of Residence



Note: Based on deaths in the 10 years preceding the survey.

PDHS 1990-91

Use of basic maternal health services is associated with child survival chances. Under-five mortality is 67 percent higher (133 per thousand) among children born to women who did not receive antenatal services and did not receive delivery care from a trained health professional compared to children whose mothers received both services. The under-five differentials, however, exhibit some unexpected differences in mortality risk across service use categories. For instance, use of both services is associated with higher neonatal risk than use of one or the other. Perhaps, women who receive antenatal care do not also seek delivery care unless they experience a problem with the pregnancy. Child mortality ($_4q_1$) is lower among children whose mothers received no services than among those whose mothers received one or the other service. This aberrant pattern may be the result of small numbers, which produce large sampling errors. Nevertheless, it is unusual that the postneonatal period, and not the neonatal period, is the age segment most sensitive to the effects of maternal health service use.

Table 9.6 presents differentials in infant and child mortality by various characteristics of the mother and child. The expected biological effects of sex on age-specific mortality are observed. Neonatal mortality is 30 percent higher among males than females; however, mortality during the postneonatal period is little affected by the sex of the child. Child mortality ($_4q_1$) is 66 percent higher among females than males, which suggests that there may be some gender-related differences in child rearing practices that favour boys over girls.

Table 9.6 Infant and child mortality by demographic characteristics

Infant and child mortality rates for the ten-year period preceding the survey, by selected demographic and biological characteristics, Pakistan 1990-91

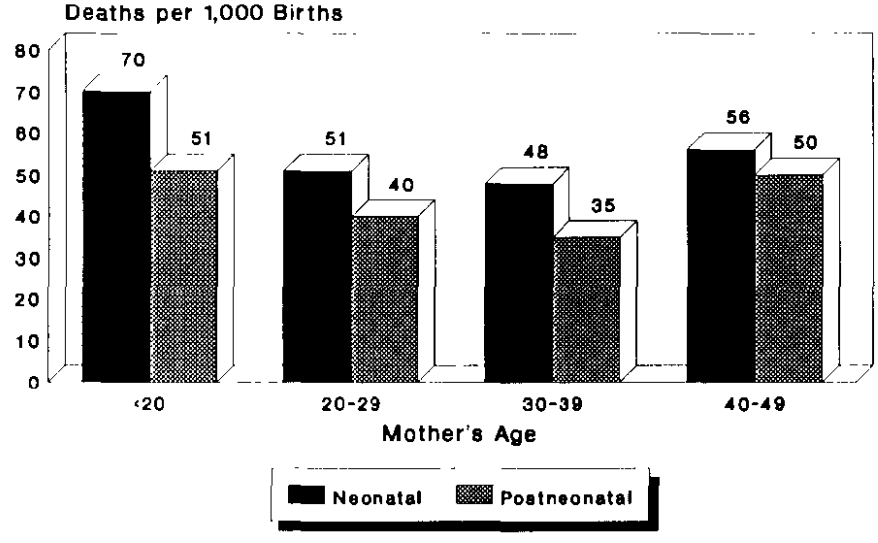
Demographic/ biological characteristic	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Sex of child					
Male	60.1	42.0	102.1	22.0	121.9
Female	46.1	39.3	85.5	36.5	118.9
Mother's age at birth					
<20	70.1	51.2	121.3	26.7	144.8
20-29	50.9	40.0	90.8	28.5	116.7
30-39	48.5	35.4	83.9	31.8	113.0
40-49	56.1	50.4	106.5	27.1	130.7
Birth order					
1	60.9	37.7	98.5	12.9	110.2
2-3	45.0	38.6	83.6	32.1	113.0
4-6	51.9	43.0	94.8	33.6	125.2
7+	63.4	43.5	106.9	32.3	135.7
Previous birth interval					
< 2 years	74.1	58.8	132.9	42.9	170.1
2-3 years	38.9	26.3	65.2	25.5	89.0
4 years or more	13.5	16.3	29.7	15.0	44.3
Birth size[2]					
Very small	90.6	40.7	131.3	30.5	157.8
Small	41.9	58.0	99.9	22.9	120.5
Average or larger	40.3	31.5	71.8	27.6	97.4

Note: The month of interview is excluded from analysis.
[1]Computed as the difference between infant and neonatal mortality
[2]Rates are for the five-year period before the survey.

Differences in under-five mortality ($_5q_0$) by maternal age at birth follow the expected pattern: mortality is highest for children of young mothers; it falls for births to mothers age 20-39; then it rises again for births to women 40 and older (see Figure 9.3). This pattern, however, is seen exclusively during the first year of life. This same U-shaped pattern is also seen in the relationship between birth order and mortality, but only during the neonatal period. After the first month, first order births are at lowest risk, and the high birth order effect is not observed.

The pace of childbearing has a powerful effect on the survival chances of Pakistani children. Under-five mortality ($_5q_0$) is four times higher among children born after an interval of less than two years than among children born after an interval of four years or more. The birth interval effect is marked for mortality in each age group, although the strength of the association diminishes with increasing age of the child. Birth interval length strongly affects survival chances throughout the first five years of life. This may indicate that

Figure 9.3
Infant Mortality by Mother's Age at First Birth



PDHS 1990-91

the relationship in Pakistan is not simply related to maternal depletion and pregnancy outcome (which would be expected to specifically influence early infant mortality), but may also be associated with constraints on breastfeeding and other nutritional inputs, child care, and the use of health services.

The size of a child at birth is closely linked to neonatal survival. Children perceived by their mothers as *very small* were 2.2 times more likely to die in the first four weeks than those perceived as *small, average* or *larger*. After the neonatal period, the relationship is less pronounced, although *average/larger* children still appear to maintain some continued advantage in survival in the postneonatal period.

9.5 Causes of Death in Early Childhood

In the PDHS, an effort was made to obtain general information on the causes of death of children born during the five-year period preceding the survey. Mothers of deceased children were asked whether a doctor or health care worker had provided an explanation or cause for the child's death. If the mother responded "yes," then she was asked to give the reported causes of death. If there was no explanation from a doctor or health worker, then the mother was asked to provide her perception of the causes of death.

Table 9.7 gives the percentage of deaths in the five years preceding the survey by reported causes of death, the source of information on the cause, and the age group of the child at death. The figures should be viewed with caution, especially those for children age 12-59 months, since they are based on small numbers. Furthermore, nearly half of all reported deaths could not be assigned to any specific category, making interpretation difficult. This is particularly true for reporting of causes during the neonatal period, when many deaths are attributed to a lack of viability at birth and, as such, are difficult to specify. This is further reflected in the small fraction of deaths for which a doctor or health worker's explanation of the cause of death could be elicited (26 percent during the neonatal period compared to 42 percent during the postneonatal period and 55 percent for children age 12 to 59 months).

Table 9.7 Causes of death in early childhood

Among nonsurviving children born during the five years preceding the survey, the percentage reported to have died from selected diseases or other causes, by age at death and person reporting the cause of death, Pakistan 1990-91

	Age at death											
	Less than 1 month			1-11 months			12-59 months			Total		
	Cause reported by			Cause reported by			Cause reported by			Cause reported by		
Disease or cause	Doctor[1]	Mother[2]	Total	Doctor[1]	Mother[2]	Total	Doctor[1]	Mother[2]	Total	Doctor[1]	Mother[2]	Total
Diarrhoea	0.6	7.2	5.5	40.2	19.5	28.3	(30.0)	(22.4)	26.6	24.1	12.8	16.9
Vomiting	2.2	5.6	4.7	7.2	13.1	10.6	(11.7)	(19.1)	15.0	6.5	9.5	8.4
Pneumonia	7.4	2.5	3.7	16.9	0.7	7.5	(5.7)	(--)	3.1	11.0	1.6	5.0
Cough	1.6	4.4	3.7	8.8	10.9	10.0	(5.4)	(17.5)	10.8	5.5	7.9	7.0
Fever	19.9	14.5	15.9	33.3	40.8	37.6	(30.4)	(49.6)	39.0	28.0	26.8	27.2
Convulsions	5.2	8.6	7.7	1.8	8.5	5.7	(8.1)	(8.4)	8.2	4.4	8.5	7.0
Measles	4.0	1.3	2.0	5.2	1.7	3.2	(14.3)	(7.0)	11.1	6.9	2.0	3.8
Other	63.8	68.6	67.4	16.2	43.6	32.0	(27.7)	(33.0)	30.1	35.4	56.7	49.0
Number	69	200	268	84	114	198	45	37	82	198	350	548

Note: Percentages add to more than 100.0 because of the recording of multiple causes of death. Figures in parentheses are based on 25 to 49 unweighted cases.
-- Less than 0.05 percent
[1]Reported to mother by a doctor or a health worker
[2]Mother's own assessment (for mothers who were not informed about the cause by a doctor or a health worker)

Despite these problems, some conclusions can tentatively be drawn from the figures on causes of death in childhood. First, over one-quarter (27 percent) of the under-five deaths were associated with fever, and about 17 percent were associated with diarrhoea (as reported either by the mother or a health worker). Cough, vomiting, convulsions, pneumonia, and measles were each reported for 4 to 8 percent of deaths, although in the case of measles, it is unlikely that the few deaths reported during the neonatal period were actually associated with measles. Deaths associated with reported convulsions may represent cases of tetanus during the neonatal period, and after the neonatal period often would suggest various conditions involving high fever or hypoxia such as meningitis, pneumonia, and other acute infections. During the postneonatal period, there is a two-fold difference between mothers' reports and health workers' reports in the percentage of deaths associated with diarrhoea. This difference suggests that children with the most severe cases of diarrhoea tend to be brought to doctors for treatment.

Lastly, it was mentioned above that the percentage of child deaths for which a doctor's or health worker's explanation was provided rises markedly with the age group of the deceased child. One substantive expla-nation for this pattern reflects greater use of curative health services among older children, which would increase the probability of the child having seen a health worker around the time of death. In addition, illnesses among older children may be less serious but of longer duration, thereby increasing the probability of having had some contact with health personnel.

In sum, acute respiratory and gastrointestinal illnesses are important morbid conditions preceding death after the neonatal period in Pakistan. Causes of neonatal mortality are more difficult to ascertain with these very limited data, although it appears likely that neonatal tetanus and other acute infectious diseases play at least some role.

9.6 High-risk Fertility Behaviour

Previous demographic research has shown that a strong relationship exists between a mother's pattern of fertility and her children's survival chances. Typically, infants and young children have a higher risk of dying if they are born to very young mothers or older mothers, if they are born after a short birth interval, or if their mothers have already had many children (see Table 9.6). In the following analysis, mothers are classified as too young if they are less than 18 years old at the time of the birth, and too old if they are 35 or older at the time of the birth. A short birth interval is defined as less than 24 months, and a high order birth as one occurring after five or more previous births (i.e., birth order six or higher). Births may also be cross-classified by combinations of these characteristics. Thus, a birth may have from zero to three high-risk characteristics.

Column one of Table 9.8 shows the percentage of births in various risk categories. More than half (55 percent) of all births in Pakistan fall into at least one risk category, with a third (19 percent) of these having multiple risk characteristics. Risk ratios are presented in column two; a risk ratio is the ratio of the proportion of children in a category who have died, to the proportion who have died in the reference category of births without any risk factors. This analysis indicates several things. First, older maternal age at birth (age >35) and high parity (BO >5) are essentially unrelated to mortality risk when not combined with a short birth interval (BI <24). Indeed, the two main factors leading to heightened risk are young age at birth (<18 years) and a short birth interval (<24 months). The only multiple risk categories that exhibit higher risk are those that include a short birth interval. Since one-third of recent births in Pakistan occurred less than 24 months after a prior birth, this finding underscores the need to reduce, through greater use of contraception, the number of closely spaced births.

Column three in Table 9.8 shows the distribution of currently married women by the risk category into which a current birth would fall. A comparison of this percent distribution with the distribution of actual births in the last six years indicates that the percentage of births falling into two of the high-risk categories would increase substantially without fertility control. However, both of these categories (births to older women and births to older women of higher parity) have risk ratios of less than one and, therefore, they do not conform to the expected pattern.

Table 9.8 High-risk fertility behaviour

Percent distribution of children born in the six years preceding the survey who are at elevated risk of mortality, and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of mortality, according to category of increased risk, Pakistan 1990-91

Risk category	Births in the 6 years preceding the survey		Percentage of currently married women[a]
	Percent of births	Risk ratio	
Not in any risk category	45.1	1.00	33.3[b]
Single risk category			
Age<18: Mother's age at birth <18	3.8	1.69	1.0
Age>34: Mother's age at birth 35+	2.7	0.93	8.8
BI<24: Birth interval <24 months	19.9	1.78	17.2
BO>5: Birth order 6 or higher	9.4	0.93	7.4
Subtotal	35.9	1.48	34.4
Multiple risk category			
Age<18 & BI<24[c]	1.0	1.64	0.3
Age>34 & BI<24	0.5	1.17	0.8
Age>34 & BO>5	7.0	0.81	20.8
Age>34 & BI<24 & BO>5	3.1	2.01	4.7
BI<24 & BO>5	7.5	2.25	5.7
Subtotal	19.0	2.00	32.0
In any risk category	54.9	1.53	66.7
Total	100.0	NA	100.0
Number	8241	NA	6364

Note: Risk ratio is the ratio of the proportion dead of births in a specific risk category to the proportion dead of births not in any risk category.
NA = Not applicable
[a]Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 years and 2 months, latest birth less than 15 months ago, and latest birth of order 5 or higher.
[b]Includes sterilised women
[c]Includes the combined categories *age <18 and birth order >5*.

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CHAPTER 10

MATERNAL AND CHILD HEALTH

Abdul Razzaque Rukanuddin and K. Zaki Hasan

One of the objectives of the Pakistan Demographic and Health Survey (PDHS) was to provide information relating to the health of children and their mothers, both of which have a crucial influence on population growth and perceptions moderating fertility behaviour. High levels of infant, child, and maternal mortality in Pakistan have drawn the attention of the government, resulting in efforts to improve survival through primary health care. The PDHS, for the first time, provides information on coverage of these services. In this chapter, an analysis is undertaken of data obtained through detailed questions about antenatal and delivery care, immunisation coverage, and treatment of diarrhoea, fever, and acute respiratory diseases in children.

10.1 Maternal Care Indicators

In Pakistan, health facilities are available to about 55 percent of the population (Grant 1992). Most of these health and MCH services are concentrated in urban areas, while the rural population has access to Rural Health Centres (RHCs), Basic Health Units (BHUs), and Family Welfare Centres (FWCs), in addition to traditional providers (dais and traditional medical practitioners, i.e., hakeems).

One of the priorities of the government is to provide medical care during pregnancy and at the time of delivery, both of which are essential for infant and child survival and safe motherhood. To measure the level of care received by women during pregnancy, mothers of all children born during the five years preceding the survey were asked whom, if anyone, they had seen for an antenatal checkup and how many such visits they had made. They were also asked if they received an injection (tetanus toxoid-TT) in the arm during pregnancy to prevent the baby from getting tetanus, i.e., convulsions after birth, and how many such injections were received. Mothers were also asked where they had given birth and who assisted during the delivery. Information about the characteristics of births was also gathered, including whether the delivery was premature or by caesarean section, and the size and weight of the baby at birth.

Antenatal Care

Table 10.1 and Figure 10.1 present background information on antenatal care for births in the five years preceding the survey. For 70 percent of these births, no antenatal care was received during pregnancy. When care was received, 23 percent was provided by a doctor, 3 percent by a nurse, Lady Health Visitor, or Family Welfare Worker, and 4 percent by either a trained or a traditional birth attendant. The percentage of births with no antenatal care increased with the birth order of the mother and was highest for women age 35 and over. Conversely, mothers receiving care from a doctor were slightly younger and of lower parity.

Table 10.1 Antenatal care

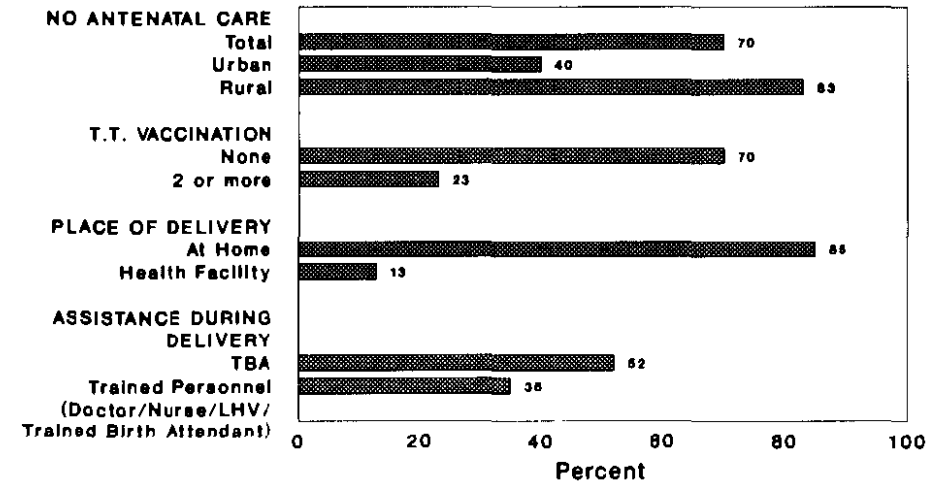
Percent distribution of live births in the five years preceding the survey by source of antenatal care during pregnancy, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Antenatal care provider[1]								Number of live births
	Doctor	Nurse/ Lady Health Visitor[2]	Trained birth attendant	Traditional birth attendant	Other	No one	Don't know/ missing	Total	
Mother's age at birth									
< 20	20.3	3.0	0.8	2.7	0.1	72.6	0.5	100.0	746
20-34	24.4	3.1	1.1	2.6	--	67.2	1.5	100.0	4843
35+	13.6	3.0	1.0	1.3	--	80.8	0.3	100.0	818
Birth order									
1	28.1	2.6	1.0	2.9	--	63.8	1.6	100.0	1167
2-3	26.4	3.6	0.9	2.5	--	65.2	1.4	100.0	2031
4-5	21.2	2.7	0.9	2.3	0.1	72.1	0.5	100.0	1538
6+	15.0	3.3	1.4	2.3	--	76.6	1.4	100.0	1671
Residence									
Total urban	51.3	5.2	1.5	1.6	--	39.6	0.8	100.0	1980
Major city	63.9	3.3	1.5	1.5	--	28.9	0.9	100.0	1140
Other urban	34.1	7.8	1.5	1.7	0.1	54.1	0.7	100.0	840
Rural	9.6	2.2	0.8	2.9	--	83.0	1.4	100.0	4426
Province									
Punjab	17.7	3.8	0.6	1.8	0.1	74.8	1.4	100.0	3933
Sindh	43.8	1.8	0.3	4.0	0.1	48.5	1.5	100.0	1364
NWFP	15.3	2.0	0.7	0.5	--	81.3	0.2	100.0	864
Balochistan	7.1	3.2	13.9	11.8	--	62.5	1.5	100.0	246
Education level attended									
No education	14.0	2.6	1.2	2.7	--	78.0	1.5	100.0	4983
Primary	33.5	4.3	0.9	1.7	--	58.9	0.6	100.0	641
Middle	49.3	7.3	0.5	1.5	--	41.1	0.3	100.0	304
Secondary +	79.3	3.7	0.5	1.5	0.2	14.6	0.2	100.0	479
Total	22.5	3.1	1.1	2.5	--	69.6	1.2	100.0	6407

Note: Figures are for births in the period 1-59 months preceding the survey.
-- Less than 0.05 percent
[1]If more than one source of antenatal care was mentioned, only the provider with the highest qualifications is considered.
[2]Includes Family Welfare Worker

No antenatal care was received for 83 percent of the births in rural areas and 40 percent in urban areas (Figure 10.1). Regionally, women in the North West Frontier Province (NWFP) had the lowest level of care (81 percent received no antenatal care), followed by Punjab (75 percent), Balochistan (63 percent) and Sindh (49 percent). Women in Balochistan relied more on traditional and trained birth attendants for antenatal care (26 percent) than women in other regions (all less than 5 percent). More educated women were considerably more likely to receive antenatal care from a doctor. For 78 percent of births to mothers with no education, no antenatal care was received by the mother. In almost four of five births (79 percent) occurring to women with secondary education, antenatal checkups were done by doctors. Antenatal care provided by physicians was highest in urban areas (51 percent), particularly among residents of major cities (64 percent).

Figure 10.1
Antenatal Care, Place of Delivery, and Assistance During Delivery



Note: Based on births in the five years preceding the survey.

PDHS 1990-91

Both the number and timing of antenatal care visits are thought to have an impact on pregnancy outcome. For slightly less than one-quarter of the births (23 percent), two or more antenatal visits were made (see Table 10.2). The median number of visits was 4.1 among cases where care was received. For births where antenatal care was received, most women had their first visit during the first five months of pregnancy.

Tetanus Toxoid Immunisation

Preventable neonatal mortality is a major concern of public health authorities. Tetanus is an important cause of neonatal death in Pakistan and can be prevented by immunisation of the mother during pregnancy. Immune protection is transferred to the baby through the placenta, if the mother has been immunised with tetanus toxoid. Previously, the World Health Organisation (WHO) had recommended that pregnant women receive two tetanus toxoid shots, four weeks apart, to protect the infant and the mother against tetanus for about two years. With recent advances in medicine, WHO now recommends a series of five tetanus toxoid shots to provide 10-15 years of protection.

Table 10.2 Number of antenatal care visits and stage of pregnancy

Percent distribution of live births in the five years preceding the survey by number of antenatal care (ANC) visits, and by the stage of pregnancy at the time of the first visit, Pakistan 1990-91

Antenatal visits/ Stage of pregnancy at first visit	All births
Number of ANC visits	
0	69.6
1	4.8
2-3	8.5
4+	14.2
Don't know, missing	2.9
Total	100.0
Median number of visits (for those with ANC)	4.1
Number of months pregnant at the time of first ANC visit	
No antenatal care	69.6
<6	19.8
6-7	5.6
8+	2.5
Don't know, missing	2.5
Total	100.0
Median number of months pregnant at first visit (for those with ANC)	4.0
Number of live births	6407

Note: Figures are for births in the period 1-59 months preceding the survey.

Table 10.3 Tetanus toxoid vaccination

Percent distribution of births in the five years preceding the survey by number of tetanus toxoid injections given to the mother during pregnancy and whether the respondent received an antenatal card, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Number of tetanus toxoid injections					Percent given antenatal card	Number of births
	None	One dose	Two doses or more	Don't know/ missing	Total		
Mother's age at birth							
< 20	71.3	7.2	21.5	--	100.0	11.4	746
20-34	68.7	6.5	24.6	0.2	100.0	13.8	4843
35+	76.5	5.7	17.3	0.5	100.0	7.6	818
Birth order							
1	65.0	6.3	28.5	0.2	100.0	16.1	1167
2-3	66.2	7.7	25.8	0.3	100.0	15.6	2031
4-5	73.7	6.1	20.0	0.2	100.0	11.2	1538
6+	74.6	5.4	19.7	0.2	100.0	8.2	1671
Residence							
Total urban	46.9	9.0	44.0	0.2	100.0	31.4	1980
Major city	42.4	9.0	48.3	0.3	100.0	42.6	1140
Other urban	53.0	9.0	38.0	--	100.0	16.2	840
Rural	80.3	5.4	14.1	0.2	100.0	4.4	4426
Province							
Punjab	69.8	6.8	23.0	0.3	100.0	10.3	3933
Sindh	59.4	7.8	32.8	--	100.0	24.8	1364
NWFP	81.9	3.5	14.5	--	100.0	6.9	864
Balochistan	89.3	4.4	6.0	0.4	100.0	5.3	246
Education level attended							
No education	77.8	5.7	16.3	0.2	100.0	6.5	4983
Primary	55.1	6.5	38.1	0.3	100.0	19.9	641
Middle	34.9	11.2	53.6	0.3	100.0	34.8	304
Secondary +	30.8	11.4	57.5	0.4	100.0	53.4	479
Total	70.0	6.5	23.3	0.2	100.0	12.7	6407

Note: Figures are for births in the period 1-59 months preceding the survey.
-- Less than 0.05 percent

For 70 percent of births in the five years preceding the survey, no tetanus toxoid immunisation was received during pregnancy (see Table 10.3 and Figure 10.1). Immunisation coverage was significantly lower in rural than in urban areas (20 vs. 53 percent). Births to women in Balochistan were least likely to be protected (10 percent). Women with no education, older women, and mothers of higher birth order children were also less likely to be immunised prior to delivery. Among women who had been immunised, more than three of four births were protected by two or more injections. The proportion receiving multiple injections was highest for residents of major cities (48 percent), for Sindh (33 percent), and for mothers with secondary or higher education (58 percent).

In recent years, health care programmes have been encouraged to distribute antenatal cards to pregnant women at the time they receive antenatal care. While 26 percent of births were preceded by antenatal care from a doctor or nurse (see Table 10.1), only 13 percent had received an antenatal card. Not

Table 10.4 Place of delivery

Percent distribution of births in the five years preceding the survey by place of delivery, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Place of delivery					Number of births
	Health facility	At home	Other	Don't know/ missing	Total	
Mother's age at birth						
20-34	14.6	83.7	0.1	1.6	100.0	4843
35+	8.1	91.4	0.1	0.3	100.0	818
Birth order						
1	19.8	78.3	0.3	1.6	100.0	1167
2-3	15.4	83.1	--	1.5	100.0	2031
4-5	11.8	87.5	0.2	0.5	100.0	1538
6+	7.9	90.6	0.1	1.5	100.0	1671
Residence						
Total urban	32.6	66.5	--	0.8	100.0	1980
Major city	46.1	53.0	0.1	0.9	100.0	1140
Other urban	14.3	85.0	--	0.7	100.0	840
Rural	4.8	93.6	0.1	1.5	100.0	4426
Province						
Punjab	10.5	88.0	0.1	1.4	100.0	3933
Sindh	27.8	70.4	0.1	1.7	100.0	1364
NWFP	6.6	93.0	0.1	0.3	100.0	864
Balochistan	2.5	96.3	--	1.2	100.0	246
Education level attended						
No education	6.7	91.7	0.1	1.5	100.0	4983
Primary	17.4	82.0	--	0.6	100.0	641
Middle	43.4	56.3	--	0.3	100.0	304
Secondary +	58.6	41.0	--	0.4	100.0	479
Antenatal care visits						
0	2.9	96.8	0.1	0.1	100.0	4458
1-3	22.7	77.3	--	--	100.0	853
4+	57.8	42.0	0.1	0.1	100.0	908
Don't know, missing	4.4	54.9	--	40.7	100.0	188
Total	13.4	85.2	0.1	1.3	100.0	6407

Note: Figures are for births in the period 1-59 months preceding the survey
-- Less than 0.05 percent

surprisingly, the distribution of frequencies for antenatal cards by background characteristics (see Table 10.3) is similar to that for antenatal care.

Place of Delivery and Assistance During Delivery

Eighty-five percent of the births occurring during the five years preceding the survey took place at home (see Table 10.4). This proportion has declined very little since the PCPS in 1984-85, when 92 percent of the live births occurred at home. Though delivery in a health facility was less common than receiving antenatal care, more than five-sixths of all births which occurred in health facilities were to women who had received antenatal care. This may be due to differences in service availability or to complications during

Table 10.5 Assistance during delivery

Percent distribution of births in the five years preceding the survey by type of assistance during delivery, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Person providing assistance								
	Doctor	Nurse/ Lady Health Visitor[1]	Trained birth attendant	Traditional birth attendant	Other	No one	Don't know/ missing	Total	Number of births
Mother's age at birth									
< 20	10.3	6.8	13.7	55.4	11.1	1.9	0.9	100.0	746
20-34	13.4	6.6	16.8	50.8	9.3	1.4	1.7	100.0	4843
35+	8.0	4.8	18.5	57.7	8.1	2.3	0.6	100.0	818
Birth order									
1	18.5	6.7	13.9	48.0	9.4	1.8	1.7	100.0	1167
2-3	14.0	7.0	17.0	49.6	9.4	1.3	1.7	100.0	2031
4-5	11.0	5.2	17.0	54.8	9.9	1.2	0.8	100.0	1538
6+	7.4	6.4	17.8	55.8	8.8	2.2	1.6	100.0	1671
Residence									
Total urban	30.7	11.6	18.3	35.2	2.7	0.7	0.8	100.0	1980
Major city	41.8	9.3	18.6	27.4	1.6	0.5	0.8	100.0	1140
Other urban	15.5	14.8	17.9	45.7	4.3	1.0	0.8	100.0	840
Rural	4.2	4.0	15.9	59.8	12.3	2.0	1.7	100.0	4426
Province									
Punjab	9.8	6.6	19.8	56.4	4.6	1.1	1.7	100.0	3933
Sindh	24.6	7.6	7.4	54.6	3.1	1.3	1.3	100.0	1364
NWFP	7.7	3.9	8.8	33.0	42.5	3.8	0.3	100.0	864
Balochistan	3.1	4.4	45.1	38.2	3.5	3.7	2.0	100.0	246
Education level attended									
No education	6.1	5.0	16.9	57.4	11.1	1.9	1.6	100.0	4983
Primary	15.1	10.4	21.5	48.4	3.3	0.1	1.3	100.0	641
Middle	39.1	13.0	12.7	29.9	3.4	0.2	1.7	100.0	304
Secondary +	57.2	11.6	10.1	17.1	2.8	1.0	0.2	100.0	479
Antenatal care visits									
0	3.2	3.6	17.5	60.9	12.2	2.1	0.4	100.0	4458
1-3	19.1	14.5	18.5	43.3	4.0	0.5	--	100.0	853
4+	52.3	13.1	11.7	21.3	1.4	0.1	0.1	100.0	908
Don't know, missing	5.1	2.0	11.7	34.8	4.1	2.0	40.2	100.0	188
Total	12.4	6.4	16.6	52.2	9.4	1.6	1.5	100.0	6407

Note: If the respondent mentioned more than one attendant, only the most qualified attendant is considered. Figures are for births in the period 1-59 months preceding the survey.
-- Less than 0.05 percent
[1]Includes Family Welfare Worker

pregnancy which may lead a woman to seek care. It may also suggest that antenatal visits give the provider an opportunity to develop rapport with the woman, increasing her willingness to seek proper care at the time of delivery. The pattern of home delivery by various background characteristics is similar to the distribution of cases in which no antenatal care or tetanus toxoid injections were received. The proportion of births taking place at health facilities was highest among women 20-34 years of age, among women having their first child, for residents of Sindh, and for those living in urban areas. Home births were more than twice as common among women with no education as among those with secondary or higher levels of educational attainment.

Sixty-nine percent of deliveries of all live births were attended by traditional or trained birth attendants, while 19 percent were assisted by a doctor or nurse (see Table 10.5). The characteristics of births attended by a doctor are consistent with those of births occurring in health facilities (Table 10.4).

Characteristics of Deliveries

Three percent of births were delivered by caesarean section (see Table 10.6). Only two percent of births were reported as premature; however, exclusion of stillbirths from this figure results in a significant underestimation of prematurity overall. In addition, it is uncertain how accurately mothers are able to identify prematurity.

Most of the deliveries took place at home, hence 9 of 10 (88 percent) births were not weighed at the time of birth. The resulting sample of birth weights is therefore subject to selection bias, such that the proportion of births weighing less than 2.5 kilograms (one of six births with a known birth weight) probably understates the problem of low birth weight overall. Three-quarters (76 percent) of the live births were reported to be of average or larger size.

Table 10.6 presents information about the average duration of labour for the most recent birth. This average was within the normal range for all subgroups examined. In births delivered by a surgical procedure, the mean was higher than for others, suggesting obstructed and/or prolonged labour as an indication for some caesarean births.

Table 10.6 Characteristics of delivery

Percent distribution of live births in the five years preceding the survey by whether the delivery was by caesarean section, whether premature, and by birth weight and the mother's estimate of baby's size at birth, Pakistan 1990-91

Delivery characteristic	Percent	Most recent birth: Average duration of labour (in hours)	Most recent birth: Number of births
C-section delivery			
C-section	2.7	11.8	99
Not C-section	95.5	7.7	3679
Missing	1.8	*	21
Total	100.0	7.8	3800
Premature birth			
On time	96.7	7.7	3723
Premature	1.9	12.9	70
Don't know	1.5	*	7
Total	100.0	7.8	3800
Birth weight			
Less than 2.5 kg	1.2	12.1	50
2.5 kg or more	6.3	7.8	252
Don't know, missing	4.2	9.4	97
Not weighed	88.3	7.7	3401
Total	100.0	7.8	3800
Size at birth			
Very small	6.2	10.7	271
Smaller than average	15.9	7.9	668
Average or larger	76.3	7.5	2854
Don't know, missing	1.5	*	6
Total	100.0	7.8	3800
Number	6407	3800	3800

Note: Figures are for births in the period 1-59 months preceding the survey.
*Based on fewer than 25 unweighted cases, number not shown

10.2 Child Care Indicators

The Pakistan Demographic and Health Survey included questions on a number of indicators of child care and utilisation of child care services. The information collected focused on immunisation coverage and the prevalence of diarrhoea, fever and respiratory illnesses among children under five years of age, as well as the type of treatment sought.

Immunisation of Children

Given the high levels of infant and child mortality in Pakistan, in 1982 the Government initiated an Expanded Programme on Immunisation (EPI) following the international guidelines recommended by the World Health Organisation (WHO). These guidelines recommend that by the age of 12 months all children should be immunised against the six preventable childhood diseases: a BCG vaccination for tuberculosis, three doses of DPT vaccine for the prevention of diphtheria, pertussis (whooping cough), and tetanus, three doses of polio vaccine, and one dose of measles vaccine. The ultimate aim of the EPI programme is to attain universal child immunisation in the country by the mid-1990s. Vaccinations received by infants and children are usually recorded on a health card which is given to the parents for each child at the time of first vaccination.

In the PDHS, mothers were asked questions designed to determine whether their children under five years of age had received injections or drops to protect against the preventable childhood diseases. Mothers were also asked whether they had a vaccination card for each child. If a card was available, the interviewer was required to ask to see it and record the dates on which the child had received vaccinations against each disease. One dose each of BCG and measles vaccine and three doses of polio and DPT are required to establish immunity.

Table 10.7 presents the percentage of children 12-23 months of age who were vaccinated at any time before the interview and by 12 months of age, by the source of information. The EPI programme has achieved considerable success although universal immunisation is far from a reality. Fifty percent of the children have received measles vaccine. The highest coverage was for BCG (70 percent) and the first two doses of DPT and polio. It may be noted that DPT and polio vaccinations are usually given together, which partially explains why the proportions were almost identical for these two vaccines. Because these

Table 10.7 Vaccinations by source of information

The percentage of children 12-23 months of age who had received specific vaccines at any time before the survey and before 12 months of age, by whether the information was from a vaccination card or from the mother, Pakistan 1990-91

Source of information and timing of vaccination	Percentage of children who received:											Number of children
		Polio				DPT						
	BCG	0	1	2	3	1	2	3	Measles	All[1]	None	
Vaccinated at any time before the survey												
Vaccination card	97.9	35.1	99.6	91.2	82.6	97.3	89.5	81.9	76.3	71.7	--	360
Mother's report	57.7	2.2	50.1	47.5	26.2	50.1	47.5	26.2	39.2	19.6	40.2	855
Either source	69.7	12.0	64.8	60.5	42.9	64.1	60.0	42.7	50.2	35.1	28.3	1215
Vaccinated by 12 months of age	61.1	10.0	58.1	51.1	32.6	57.9	50.6	32.7	35.5	21.8	34.7	1215

Note: The DPT coverage rate for children without a written record is assumed to be the same as that for polio vaccine since mothers were specifically asked whether the child had received polio vaccine. Children reported by the mother to have received only two or three doses of polio vaccine were assumed to have received polio 1, 2 and 3, respectively. Children reported by the mother to have received four or more doses of polio vaccine were additionally assumed to have received polio 0. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

-- Less than 0.05 percent

[1]Children who are fully vaccinated, i.e., those who have received BCG, measles and three doses of DPT and polio vaccines

vaccinations are administered together, and because mothers can more easily identify polio vaccine (given as drops in the mouth), when data were collected by mother's report, only polio was asked about and DPT was assumed to be the same. For both DPT and polio, the dropout rates between the first and the second doses were very low (about 4 percentage points). However, the dropout between the second and third doses increased substantially (to about 17 to 18 percentage points). A relatively recent recommendation is the administration of a dose of polio vaccine at the time of birth (polio 0). The use of this dose has not yet become widespread in Pakistan, as only 12 percent of the children 12-23 months of age had received this dose at the time of birth.

Seventy-two percent of children age 12-23 months who have a vaccination card have received all the recommended vaccinations,[1] but mothers were able to produce vaccination cards for only 30 percent of the children. The mothers' reports indicated a much lower level of complete coverage (20 percent). According to their reports, 40 percent of the children received no vaccinations. Combining data from both sources, that is, vaccination cards and mothers' reports, the proportion vaccinated against all diseases was 35 percent. Only 22 percent were fully vaccinated by 12 months of age and 36 percent had received measles vaccine within their first year of life.

Table 10.8 and Figure 10.2 show vaccination coverage for children 12-23 months of age by background characteristics, combining both sources of information (vaccination card information and mothers' reports.) In general, vaccine coverage is consistently higher among male children, although disparities are all less than 10 percentage points. This difference might be due to son preference, which is still prevalent in Pakistan. Differences in coverage by birth order are neither large nor consistent from one vaccine to another. Complete vaccination coverage was higher in urban (46 percent) than in rural areas (30 percent). However, more than half of the children in rural areas had received BCG and two doses of DPT and polio vaccine; while 44 percent were vaccinated against measles. The children in Punjab and NWFP were more protected than children in Sindh and in Balochistan, where the EPI programme has met with less success than elsewhere in Pakistan. As seen for the indicators of maternal health care, these findings also reflect a positive correlation between the education level of the mother and service utilisation. The results suggest that educational attainment above the primary school level may be an important factor in improving vaccination coverage of children.

Table 10.9 shows vaccinations received by children in the first year of life by current age for children one to four years of age. The proportion of children whose immunisation status was determined according to a vaccination card declines as the age of the children increases. This may in part reflect increased use of vaccination cards in the recent past, as well as an improved coverage overall. In addition, vaccination cards may have been lost or discarded more frequently for older children with completed immunisations. The highest level of vaccination coverage against all diseases is noted for children age 12-23 months; coverage then declines progressively with increasing age up to 36-47 months. Thereafter, coverage again increases slightly for children 48-59 months of age.

[1] It should be noted that the vaccination rates reported in the PDHS are lower than of those reported in the 1991 EPI coverage survey conducted jointly by WHO/UNICEF and the Government of Pakistan which estimated immunisation coverage to be 86 percent for children age 12-23 months with vaccination cards. The PDHS results, however, are more in line with the preliminary results of the 1991 Pakistan Integrated Household Survey.

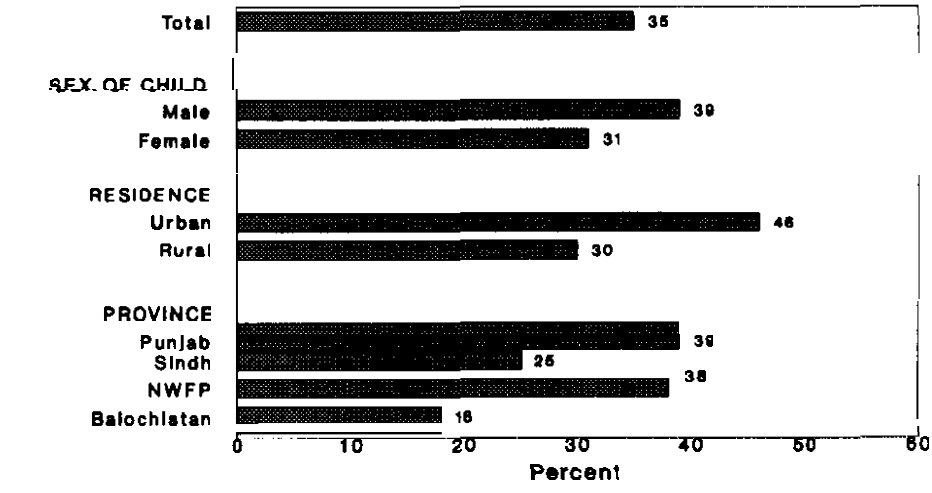
Table 10.8 Vaccinations by background characteristics

Percentage of children 12-23 months of age who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report) and the percentage with a vaccination card seen by the interviewer, by selected background characteristics, Pakistan 1990-91

Background characteristic	Percentage of children who received:												
		Polio				DPT						Percentage with a card	Number of children
	BCG	0	1	2	3	1	2	3	Measles	All[1]	None		
Sex													
Male	72.8	12.2	67.0	61.9	45.8	66.7	61.7	45.4	54.6	39.1	25.3	30.7	585
Female	66.7	11.7	62.7	59.1	40.3	61.7	58.4	40.2	46.1	31.3	31.0	28.7	629
Birth order													
1	76.6	11.9	70.3	65.3	39.7	69.1	64.9	39.3	57.0	33.5	21.1	29.2	228
2-3	71.4	16.5	67.1	63.6	43.0	66.4	62.6	42.9	50.6	33.8	26.8	30.0	380
4-5	65.4	11.1	65.1	59.2	44.6	65.1	59.2	44.6	48.4	36.8	31.4	31.1	276
6+	66.4	7.5	58.0	54.5	43.6	57.3	54.1	43.2	46.5	36.2	32.2	28.3	331
Residence													
Total urban	84.2	21.5	80.7	77.1	55.4	80.6	77.0	55.4	64.6	45.6	14.0	34.7	383
Major city	83.5	27.7	78.8	74.6	52.9	78.7	74.5	52.9	64.4	43.7	15.3	34.5	215
Other urban	85.2	13.5	83.1	80.3	58.7	83.1	80.3	58.7	64.8	48.0	12.4	35.0	168
Rural	62.9	7.6	57.5	52.8	37.2	56.5	52.1	36.9	43.6	30.2	34.8	27.3	832
Province													
Punjab	75.8	10.2	70.7	67.3	46.9	69.6	66.6	46.7	54.4	38.6	22.2	31.2	763
Sindh	60.2	20.4	54.0	50.3	33.0	54.5	50.3	33.0	41.2	25.3	38.5	25.7	244
NWFP	63.8	10.1	60.0	52.3	44.5	60.0	51.9	44.0	48.2	37.6	33.5	31.3	165
Balochistan	37.1	2.7	39.3	29.1	23.4	36.5	28.5	22.9	34.1	17.8	57.2	18.6	43
Education level attended													
No education	62.9	9.4	58.1	53.4	38.2	57.5	53.0	38.1	43.6	31.4	34.8	29.2	929
Primary	89.6	23.2	87.0	83.6	53.8	85.8	82.4	52.6	65.5	39.0	7.3	29.5	127
Middle	88.3	12.5	80.7	78.2	67.0	80.7	78.2	67.0	68.6	57.0	11.5	31.3	62
Secondary +	96.2	21.5	89.0	86.1	58.3	89.0	86.1	58.3	81.5	51.5	3.8	33.4	97
Total	69.7	12.0	64.8	60.5	42.9	64.1	60.0	42.7	50.2	35.1	28.3	29.6	1215

Note: See footnote for Table 10.7 for definitions of vaccine coverage.
[1]Children who are fully vaccinated, i.e., those who have received BCG, measles and three doses of DPT and polio vaccines

Figure 10.2
Percentage of Children 12-23 Months Who Are Fully Vaccinated



Note: Includes health card information and mothers' reports.

PDHS 1990-91

Children's Morbidity and Treatment Patterns

The main causes of death in infants and children in Pakistan are acute lower respiratory infections and diarrhoea. Information was collected in the PDHS for all children under five years of age on the occurrence of symptoms of acute respiratory infection (ARI), fever, and diarrhoea in the two weeks preceding the survey. Mothers were also asked about treatment provided to children with any of these conditions.

Table 10.9 Vaccinations in first year of life by current age

The percentage of children one to four years of age for whom a vaccination card was seen by the interviewer and the percentage vaccinated for BCG, DPT, polio, and measles during the first year of life, by current age of the child, Pakistan 1990-91

Vaccine	Current age of child in months				All children 12-59 months
	12-23	24-35	36-47	48-59	
Vaccination card seen by interviewer	29.6	20.3	13.9	11.7	19.3
Percent vaccinated at 0-11 months					
BCG	61.1	59.5	46.4	49.9	54.5
Polio 0	10.0	5.9	5.1	2.7	6.1
Polio 1	58.1	54.1	39.9	44.9	49.5
Polio 2	51.1	50.3	35.8	42.5	45.0
Polio 3	32.6	34.1	21.6	28.0	29.2
DPT 1	57.9	54.1	39.9	45.6	49.6
DPT 2	50.6	49.9	35.8	42.5	44.8
DPT 3	32.7	35.7	22.2	28.0	29.7
Measles	35.5	26.6	25.4	38.9	31.3
All vaccinations[1]	21.8	16.9	13.6	20.7	18.2
No vaccinations	34.7	37.5	51.0	45.7	42.0
Number of children	1215	1141	1167	966	4489

Note: See footnote for Table 10.7 for definitions of vaccine coverage.
[1]Children who are fully vaccinated, i.e., those who have received BCG, measles and three doses of DPT and polio vaccines

Acute Respiratory Infection

Table 10.10 and Figure 10.3 present background information for children with cough accompanied by rapid breathing, i.e., acute respiratory infection (ARI), and the type of treatment given. Adjustments for seasonality have not been made in this table, though the fieldwork took place mostly in the winter, when the prevalence of ARI is expected to be higher. One in six children (16 percent) had suffered from symptoms of ARI during the two weeks preceding the survey. The most vulnerable period for this disease was the first year of life. There were only small differences according to gender and birth order. Children in major cities exhibited a lower prevalence of ARI symptoms than those in other areas. ARI symptoms were least prevalent (8 percent) in Balochistan, while the highest prevalence was observed in Punjab and Sindh. ARI symptoms were less evident among children whose mothers had secondary or more education.

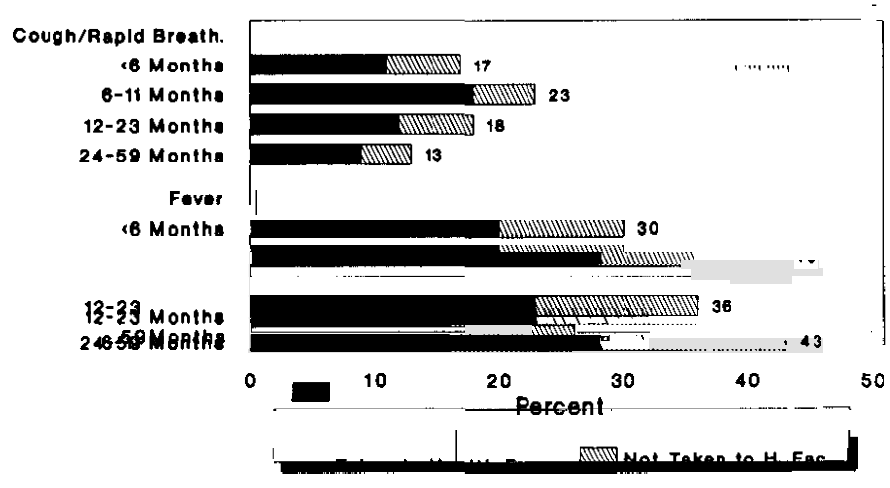
Table 10.10 Prevalence and treatment of acute respiratory infection

Percentage of children under five who were ill with a cough accompanied by rapid breathing during the two weeks preceding the survey, and the percentage of ill children who were treated with specific remedies, by selected background characteristics, Pakistan 1990-91

Background characteristic	Percentage of children with cough and fast breathing	Among children with cough and rapid breathing: Percentage taken to a health facility or provider[1]	Percentage treated with: Antibiotic pill or syrup	Injection	Cough syrup	Home remedy	Other	None	Number of children
Child's age									
<6 months	17.4	65.5	13.6	11.1	23.7	5.9	49.1	12.2	679
6-11 months	23.4	76.8	20.5	12.0	32.8	3.9	50.9	7.9	608
12-23 months	18.0	65.9	18.1	13.7	37.4	5.5	41.8	14.2	1215
24-35 months	16.2	64.8	14.8	17.2	35.6	7.8	33.0	17.3	1141
36-47 months	13.7	65.5	11.9	14.2	34.7	1.7	43.9	15.9	1167
48-59 months	10.4	57.8	18.9	9.4	33.4	3.6	29.4	22.2	966
Sex									
Male	15.8	67.5	16.2	14.5	33.4	6.3	41.8	15.2	2942
Female	16.2	65.2	16.4	12.3	33.9	3.5	41.0	14.4	2833
Birth order									
1	17.0	72.7	21.0	12.5	37.9	4.5	39.6	8.5	1026
2-3	14.9	62.5	17.3	9.8	36.7	6.4	34.6	16.5	1869
4-5	16.0	74.8	10.3	15.0	29.6	4.5	55.0	8.9	1377
6+	16.7	58.8	17.0	16.8	31.0	3.9	38.2	22.3	1504
Residence									
Total urban	13.8	76.2	23.9	12.8	38.0	3.1	40.6	11.4	1835
Major city	12.3	81.4	33.8	11.2	39.8	3.1	38.7	5.7	1055
Other urban	15.9	70.8	13.6	14.5	36.0	3.2	42.6	17.4	781
Rural	17.0	62.6	13.4	13.7	32.1	5.6	41.7	16.0	3940
Province									
Punjab	17.0	68.0	9.3	11.3	28.1	5.1	50.7	12.2	3516
Sindh	17.2	63.3	32.5	18.6	38.2	3.7	22.5	23.2	1222
NWFP	12.2	61.1	19.1	15.3	53.6	7.2	29.7	12.8	815
Balochistan	8.3	77.4	40.5	11.6	54.6	0.0	16.9	14.6	222
Education level attended									
No education	16.5	62.8	14.4	13.4	31.9	4.3	43.0	17.3	4457
Primary	16.6	76.8	20.2	12.7	36.4	11.2	38.1	5.2	588
Middle	13.9	92.4	19.2	21.0	53.3	5.4	37.0	2.0	277
Secondary +	11.2	78.3	34.4	9.1	38.8	1.9	27.6	6.3	454
Total	16.0	66.4	16.3	13.4	33.7	4.9	41.4	14.8	5776

Note: Figures are for children born in the period 1-59 months preceding the survey.
[1]Includes hospital, clinic, Rural Health Centre, Basic Health Unit, private doctor, Family Welfare Worker and Lady Health Visitor

Figure 10.3
Prevalence of ARI Symptoms and Fever in the Two Weeks Preceding the Survey



Note: Based on children age 1-59 months.

PDHS 1990-91

Two-thirds (66 percent) of the children who suffered ARI symptoms were taken to a health facility or health provider for treatment. Children most likely to be treated were those age 6-11 months, those living in urban areas, particularly major cities, and those whose mothers had a middle school education. In Balochistan, where health facilities are sparse, the proportion of children going for treatment was the highest (77 percent), although other provinces would be expected to have better service coverage. The findings on ARI from Balochistan may reflect differences in reporting; perhaps only the most severe cases were reported and were also therefore more likely to receive care.

One-third (34 percent) of the children were treated with cough syrup, while 16 percent were given antibiotics and 13 percent were given injections. Two of five children (41 percent) were given other treatments, while 15 percent were not treated at all. Children most likely to have untreated symptoms were those four years of age, children of the highest birth orders, children in Sindh, and children whose mothers had no education.

Prevalence of Fever

During the period of interviewing for the PDHS, fever, a sign of malaria as well as other illnesses, was more prevalent (30 percent) than cough with rapid breathing (16 percent). The incidence of fever was particularly high (43 percent) among infants age 6-11 months (see Table 10.11 and Figure 10.3). This is the age at which young children are most vulnerable to both fever and ARI. The prevalence of fever was found to be almost the same among males and females, in almost all birth orders, and in urban and rural areas. Its prevalence was highest (34 percent) in Sindh and lowest (16 percent) in Balochistan. Fever was also more prevalent among children of women with no education.

Table 10.11 Prevalence and treatment of fever

Percentage of children under five with a fever during the two weeks preceding the survey, and the percentage of children with a fever who were treated with specific remedies, by selected background characteristics, Pakistan 1990-91

Background characteristic	Percentage of children with fever	Among children with fever: Percentage taken to a health facility or provider[1]	Among children with fever: Percentage treated with: Anti-malarial	Antibiotic pill or syrup	Injection	Home remedy	Other	None	Number of children
Child's age									
<6 months	29.5	68.7	8.5	21.5	14.8	8.8	59.5	13.9	679
6-11 months	42.6	66.6	5.8	21.2	12.4	5.1	69.9	11.0	608
12-23 months	35.5	65.0	6.1	20.9	12.2	4.4	66.5	14.0	1215
24-35 months	30.5	65.9	7.3	18.3	18.9	7.9	55.5	18.3	1141
36-47 months	23.5	67.4	5.4	15.0	14.1	2.3	67.4	15.7	1167
48-59 months	23.3	54.4	4.5	20.0	13.9	3.6	54.7	19.6	966
Sex									
Male	30.3	66.7	5.9	18.7	14.9	6.2	63.8	14.3	2942
Female	29.9	62.9	6.7	20.2	13.8	4.3	61.4	16.5	2833
Birth order									
1	29.5	67.3	5.6	22.6	11.5	6.5	62.8	10.7	1026
2-3	29.8	64.3	6.4	19.2	12.6	5.6	67.4	12.9	1869
4-5	30.0	67.5	5.7	19.0	13.7	4.8	62.3	15.2	1377
6+	31.0	61.5	7.1	18.0	19.0	4.6	57.0	21.5	1504
Residence									
Total urban	30.9	75.7	9.1	27.9	13.2	2.4	63.9	11.2	1835
Major city	31.2	78.0	7.9	33.7	11.1	1.8	67.4	8.7	1055
Other urban	30.4	72.5	10.6	20.0	16.1	3.2	59.0	14.7	781
Rural	29.7	59.6	4.9	15.3	15.0	6.7	62.0	17.4	3940
Province									
Punjab	30.8	63.1	4.5	10.2	11.6	7.0	67.0	14.7	3516
Sindh	34.2	72.4	11.4	37.1	22.0	1.5	49.6	16.7	1222
NWFP	24.9	60.8	4.1	30.7	15.0	5.1	70.7	13.1	815
Balochistan	16.1	51.7	10.5	29.5	7.2	0.3	37.1	31.6	222
Mother's education level									
No education	31.1	61.1	5.8	17.0	14.8	5.7	62.0	17.4	4457
Primary	29.4	80.5	7.5	24.5	14.5	4.7	63.0	9.3	588
Middle	20.6	79.4	14.1	27.3	16.5	4.9	58.7	12.0	277
Secondary +	26.6	78.5	6.4	36.7	9.0	1.0	71.0	2.7	454
Total	30.1	64.8	6.3	19.4	14.4	5.3	62.6	15.4	5776

Note: Figures are for children born in the period 1-59 months preceding the survey.
[1]Includes hospital, clinic, Rural Health Centre, Basic Health Unit, private doctor, Family Welfare Worker and Lady Health Visitor

As was seen for ARI symptoms, two-thirds (65 percent) of the children having fever during the two weeks preceding the survey were taken to health facilities for treatment. Only 6 percent of children with a fever were treated with antimalarial medicine, 19 percent received an antibiotic, and 14 percent were given an injection. Almost two-thirds (63 percent) of the children who had a fever were treated with other medicine.

Prevalence of Diarrhoea

Diarrhoeal disease is a major cause of infant and child morbidity and mortality in Pakistan. In Table 10.12, the prevalence of diarrhoea among children under five during the preceding 24 hours and the preceding 2 weeks is presented by background characteristics of children and their mothers. Fifteen percent of all children had suffered from diarrhoea during the previous two weeks, while two percent had suffered from bloody diarrhoea. Because of the seasonality of bloody dysentery, with more cases occurring during the monsoon season and the hot season, these figures may underestimate annual prevalence. Eight percent of the children were reported as having diarrhoea in the past 24 hours. The incidence of diarrhoea was highest among children under two years of age. Regionally, Balochistan had the lowest prevalence (8 percent), and Sindh the highest (20 percent). Prevalences were lowest (10 percent) among mothers with secondary or higher level education. The pattern of differentials for diarrhoea in the previous 24 hours is similar to that for diarrhoea in the preceding two weeks. Given the low prevalence of bloody diarrhoea, it is difficult to detect differences according to background characteristics.

Table 10.12 Prevalence of diarrhoea

Percentage of children under five who had diarrhoea and bloody diarrhoea in the two weeks preceding the survey, and the percentage who had diarrhoea in the preceding 24 hours, by selected background characteristics, Pakistan 1990-91

Background characteristic	Diarrhoea in the *preceding 2 weeks*[1]		Any *diarrhoea* in preceding 24 hours[2]	Number of children
	All diarrhoea	Diarrhoea with blood		
Child's age				
<6 months	18.4	1.4	12.2	679
6-11 months	20.2	1.4	12.3	608
12-23 months	19.2	1.9	11.4	1215
24-35 months	15.9	2.3	9.4	1141
36-47 months	9.3	0.7	3.9	1167
48-59 months	7.1	1.4	3.2	966
Sex				
Male	15.0	2.0	8.7	2942
Female	14.1	1.1	7.9	2833
Birth order				
1	15.2	1.5	8.9	1026
2-3	15.0	1.2	8.9	1869
4-5	13.5	1.9	7.6	1377
6+	14.4	1.8	7.7	1504
Residence				
Total urban	15.0	0.9	7.7	1835
Major city	15.1	0.9	7.5	1055
Other urban	15.0	1.0	8.0	781
Rural	14.3	1.8	8.5	3940
Province				
Punjab	14.4	1.7	8.0	3516
Sindh	19.6	1.5	10.6	1222
NWFP	9.6	1.1	7.0	815
Balochistan	8.3	1.8	4.5	222
Mother's education level				
No education	14.6	1.7	8.3	4457
Primary	17.0	1.6	9.6	588
Middle	16.2	--	11.0	277
Secondary +	9.5	1.1	4.7	454
Total	14.5	1.6	8.3	5776

Note: Figures are for children born in the period 1-59 months preceding the survey.
-- Less than 0.05 percent
[1]Includes diarrhoea in the past 24 hours
[2]Includes diarrhoea with blood

Knowledge and Use of ORS Packets

The government's information, education, and communication (IEC) programme has focused primarily on educating couples, particularly mothers, about the prevention of diarrhoea and childhood death due to dehydration. In the PDHS, information was obtained about knowledge and use of ORS packets. Mixed with water, the commercially prepared packets of oral rehydration salts (ORS) are used in oral rehydration therapy (ORT) to treat dehydration due to diarrhoea. Since knowledge of ORS is a prerequisite

for its use, special efforts were made to investigate the extent and accuracy of mothers' knowledge of ORS, in addition to determining its use for diarrheal treatment.

Table 10.13 and Figure 10.4 show that knowledge of ORS is very widespread (90 percent of the mothers recognised ORS packets). Recognition was relatively low among teenage mothers, among rural women, particularly women in Balochistan, and among women with no education. Knowledge of ORS was almost universal among women with any education and among women living in NWFP (99 percent).

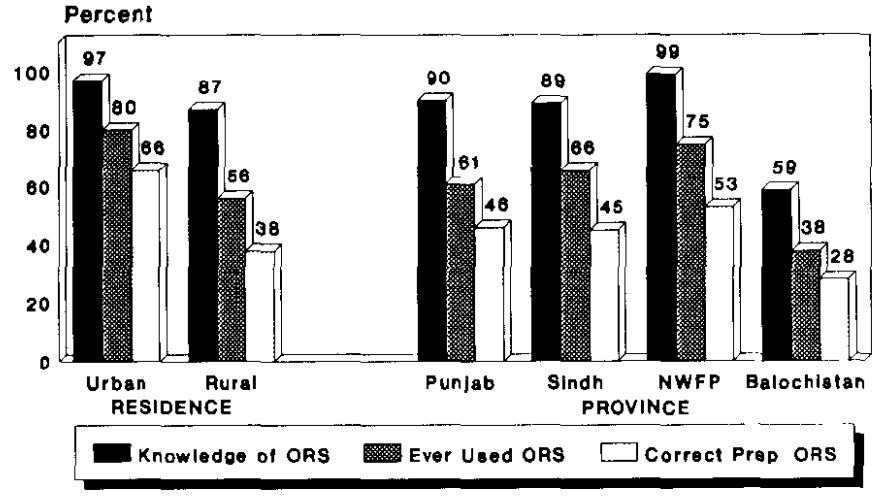
Table 10.13 Knowledge and use of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about and have ever used ORS packets and the percentage of users who prepared the solution correctly, by background characteristics, Pakistan 1990-91

Background characteristic	Percentage who know about ORS packets	Percentage who have ever used ORS packets	Number of mothers	Percentage of users who prepared solution correctly[1]	Number of users
Mother's age					
15-19	83.4	45.9	209	65.0	93
20-24	88.8	60.3	774	72.5	462
25-29	91.0	67.9	1202	74.6	804
30-34	90.5	66.4	859	76.9	570
35+	89.3	61.1	1016	70.2	616
Residence					
Total urban	96.7	79.9	1184	81.7	943
Major city	97.2	82.6	669	83.6	552
Other urban	96.1	76.5	515	79.0	391
Rural	86.7	56.4	2876	68.4	1603
Province					
Punjab	89.8	61.2	2441	75.7	1478
Sindh	89.1	65.8	893	68.5	586
NWFP	98.6	75.4	567	71.2	427
Balochistan	58.9	38.2	159	75.2	55
Education level attended					
No education	87.3	58.5	3213	70.0	1861
Primary	98.3	76.8	373	78.5	286
Middle	98.9	81.7	172	77.8	138
Secondary +	99.1	86.4	301	89.0	261
Total	89.7	63.3	4059	73.3	2546

[1]It is assumed that the solution was prepared correctly if the whole packet was prepared at once and the amount of water used was 800-1200 millilitres.

Figure 10.4
Knowledge and Use of ORS
by Residence and Province



Note: Based on mothers with children under age five.

PDHS 1990-91

The survey indicates that about two-thirds (63 percent) of the mothers had ever used ORS packets. Frequencies for use of ORS by background characteristics of the mother followed the same pattern noted for knowledge of ORS, though knowledge was considerably more widespread than use in each subgroup. Among mothers who had used ORS packets, about three-quarters (73 percent) had mixed the solution correctly the last time they had prepared it. Women living in rural areas, those with no education and young mothers were less likely to have prepared the solution correctly.

Treatment of Diarrhoea

Table 10.14 and Figure 10.5 indicate that almost half (48 percent) of the children with diarrhoea in the two weeks preceding the survey were taken to a health facility for treatment. Children who live in urban areas, those in Sindh, and children of educated mothers were more likely to be taken to a health facility or provider than other children. Older children (48-59 months) and males were less likely to be taken to a health facility.

About two of five children (39 percent) with diarrhoea were treated with ORS packets, but 50 percent were given oral rehydration therapy (ORT) or increased fluids. Allopathic medicines (antibiotics or injections) were received by about 11 percent of children who had diarrhoea. In general, children who were very young (less than 6 months), those in rural areas, and those whose mothers had little or no education were less likely to be treated appropriately, i.e., with ORT or increased fluids. There was no consistent pattern by birth order of the child, although low birth order children were generally less likely to get appropriate care.

Table 10.14 Treatment of diarrhoea

Percentage of children under five years who had diarrhoea in the two weeks preceding the survey who were taken for treatment to a health facility or provider, the percentage who received oral rehydration therapy (ORT), the percentage who received increased fluids, the percentage who received neither ORT nor increased fluids, and the percentage receiving other treatments, by selected background characteristics, Pakistan 1990-91

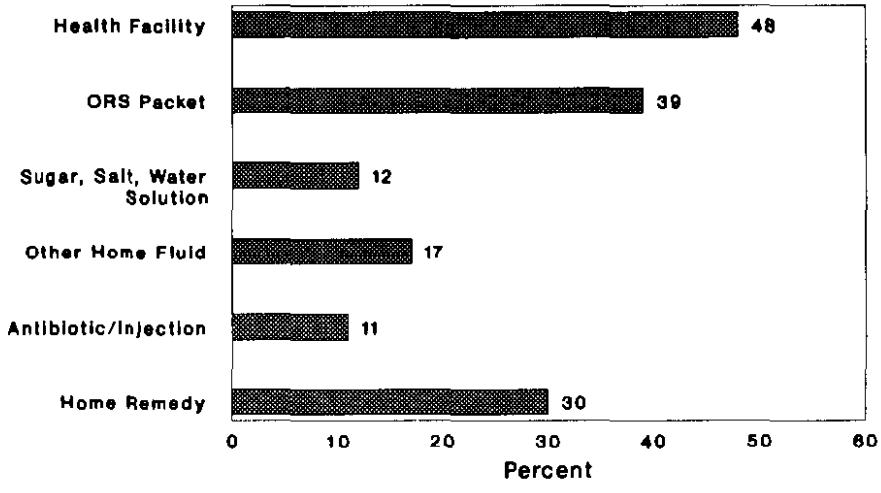
Background characteristic	Percentage taken to a health facility or provider[1]	Oral rehydration therapy (ORT)			Percentage receiving increased fluids	Percentage receiving neither ORT nor increased fluids	Percentage receiving other treatments:			Number of children with diarrhoea
		ORS packets	Sugar, salt, water solution	Other home fluid			Anti-biotics	In-Injection	Home remedy, other	
Child's age										
<6 months	43.2	25.6	12.0	5.9	4.8	62.2	3.3	2.0	23.4	125
6-11 months	52.9	42.5	10.7	11.6	8.1	48.7	8.7	0.2	36.5	123
12-23 months	54.2	43.9	14.5	21.1	12.5	43.6	11.4	1.5	28.6	233
24-35 months	44.4	37.7	10.9	22.2	8.2	50.4	11.9	2.5	25.3	181
36-47 months	52.2	40.2	13.3	19.3	7.6	46.4	13.3	1.7	42.5	109
48-59 months	33.0	39.6	5.9	14.7	8.6	51.1	2.3	3.3	33.2	69
Sex										
Male	43.4	38.2	11.5	15.6	10.3	49.7	9.8	1.6	26.5	441
Female	53.6	39.4	12.4	18.4	7.1	49.4	8.9	1.9	34.7	400
Birth order										
1	48.0	31.9	13.4	9.9	7.0	57.4	5.9	--	25.6	156
2-3	48.1	37.1	14.1	15.7	5.6	53.3	11.4	1.5	29.1	281
4-5	44.6	39.4	7.3	20.8	13.8	44.0	10.5	2.8	30.8	186
6+	51.8	45.4	12.0	20.3	10.0	43.8	8.4	2.4	35.3	217
Residence										
Urban	62.7	46.9	24.2	17.7	12.4	38.7	14.2	1.0	30.3	276
Major city	65.6	53.8	33.4	17.2	13.3	30.6	18.0	0.9	26.8	159
Other urban	58.8	37.5	11.6	18.4	11.1	49.7	9.0	1.0	35.1	117
Rural	41.2	34.8	6.0	16.6	7.1	54.9	7.1	2.2	30.5	565
Province										
Punjab	43.9	35.7	8.0	14.6	8.8	54.0	5.3	1.6	30.4	505
Sindh	59.7	48.4	22.9	21.9	8.9	37.8	17.4	1.8	30.7	239
NWFP	41.5	31.2	4.6	14.7	9.9	59.2	11.1	3.4	35.8	78
Balochistan	48.3	30.2	9.8	26.0	3.4	39.2	9.1	0.3	5.1	18
Education level attended										
No education	45.0	37.6	9.7	17.2	6.7	50.8	8.0	2.1	30.2	653
Primary	60.7	39.9	16.2	15.8	18.1	51.2	9.5	--	35.2	100
Middle+	58.1	46.1	23.9	16.1	13.8	38.7	20.0	1.3	27.0	88
Total	48.3	38.8	11.9	16.9	8.8	49.6	9.4	1.8	30.4	840

Note: Oral rehydration therapy (ORT) includes solution prepared from ORS packets, home solution made from sugar, salt and water, and other home fluids (such as rice water or lassi). Figures are for children born in the period 1-59 months preceding the survey.

-- Less than 0.05 percent

[1]Includes hospital, clinic, Rural Health Centre, Basic Health Unit, private doctor, Family Welfare Worker and Lady Health Visitor

Figure 10.5
Percentage of Children Receiving Treatment for Diarrhoea by Type of Treatment



Note: Based on children age 1-59 months who had diarrhoea in the two weeks preceding the survey.

PDHS 1990-91

The mothers whose children suffered from diarrhoea in the two weeks prior to the survey were asked whether their feeding practices changed during the episode. Among those mothers who were breastfeeding, 65 percent of the children were breastfed as usual during the diarrhoeal episode, while 13 percent either reduced their frequency of breastfeeding or stopped breastfeeding altogether (see Table 10.15). Aside from breast milk, 65 percent of the children got the same amount of fluid as before the episode. Only 9 percent got an increased amount of fluids and 21 percent received a reduced amount of fluids. The same pattern was followed with respect to the consumption of food during the diarrhoea episode.

Table 10.15 Feeding practices during diarrhoea

Percent distribution of feeding practices among children under five years who had diarrhoea in the two weeks preceding the survey, Pakistan 1990-91

Feeding practice during diarrhoea	Percent
Breastfeeding frequency[1]	
Same as usual	65.2
Increased	17.4
Reduced	12.2
Stopped	1.1
Don't know, missing	4.1
Total	100.0
Number of children	439
Amount of fluids given	
Same as usual	65.4
More	8.8
Less	21.1
Don't know, missing	4.7
Total	100.0
Amount of food given	
Same as usual	64.8
More	7.7
Less	21.9
Don't know, missing	5.6
Total	100.0
Number of children	840

Note: Figures are for children born in the period 1-59 months preceding the survey.
[1]Applies only to last child who is still breastfed

REFERENCE

Grant, James P. 1992. *The State of the World's Children 1992*. New York: Oxford University Press.

CHAPTER 11

FEEDING PATTERNS AND THE NUTRITIONAL STATUS OF CHILDREN

Tauseef Ahmed and Mohammad Ayub

Over the years, concern has been expressed about the growing number of children living in poor conditions. Poverty affects feeding practices and both of these factors affect the overall mental and physical growth of children. This chapter focuses on the nutritional situation of young children who were born in the five years preceding the survey. Patterns of breastfeeding are of particular interest because of their effects on postpartum amenorrhoea. Some information on this topic has already been provided in the chapter on the proximate determinants of fertility (Chapter 7). Since breastfeeding and food supplementation play a vital role in determining the duration of postpartum amenorrhoea and birth intervals, the dynamics of these feeding practices are of great importance in societies like Pakistan where there is little fertility control at the individual level.

In the PDHS, information was collected on the birth weight of children, breastfeeding practices, and the types of food items given to children before breastfeeding began. Details were also collected on the ages when various liquids and solid or mushy foods were first given to children on a regular basis. The mother was also asked about liquids and solid/mushy foods given to the child and the use of bottles with nipples for feeding children during the 24 hours before the interview for all children alive at the time of the survey. In the PDHS, anthropometric measurements were collected for all the respondents' children age less than five years who were present in the household. Information on breastfeeding patterns and food supplementation is also analysed in this chapter, followed by a description of the nutritional status of children derived from anthropometric measurements.

During the 1970s and 1980s, several surveys in Pakistan identified infants and young children considered to be at high risk of being undernourished. One study found that 48 percent of all Pakistani children were malnourished and 10 percent were severely malnourished (Nutrition Division 1988). Anemia is another serious nutrition-related condition that has been reported for 65 percent of young children and 45 percent of pregnant mothers. Undernutrition is less prominent among infants under 6 months of age but increases rapidly with age.

11.1 Breastfeeding and Nutritional Intake

In this section we focus on breastfeeding and the nutritional intake of children born in the five years preceding the survey. Table 11.1 shows the percentage of children who were ever breastfed and at what stage infants first received breast milk. It is well documented that breastfeeding is quite common in Pakistan (Population Welfare Division 1986). The PDHS data are consistent with these findings. About 94 percent of all infants born in the five years preceding the survey were ever breastfed by their mothers. This figure is similar to the values from the 1984-85 PCPS (98 percent) and the 1975 PFS (95 percent). Breastfeeding practices in traditional societies such as Pakistan are based on cultural norms and social expectations. Differentials for various background characteristics are also presented in Table 11.1. The differentials are generally quite small, since at least 89 percent of children in every subgroup had been breastfed at some time. Children born in a health facility are less likely to be breastfed (89 percent) than children born at home (96 percent). Among babies of mothers with no education 94 percent had been breastfed, compared to 89 percent of children whose mothers had some secondary or higher education. A slightly smaller proportion of babies in the major cities had been breastfed (91 percent) than babies in the rest of the country (94 percent). These

Table 11.1 Initial breastfeeding

Percentage of all children born in the five years preceding the survey who were ever breastfed and the percentage of last-born children who started breastfeeding within one hour and within one day of birth, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Among all children		Among last-born children		
	Percentage ever breastfed	Number of children	Percentage started breastfeeding within 1 hour of birth	Percentage started breastfeeding within 1 day of birth	Number of last-born children
Time since birth					
0-11 months	95.3	1446	7.4	25.5	1423
12-23 months	93.7	1337	10.6	26.0	1207
24-35 months	92.2	1295	9.6	27.7	746
36-47 months	94.0	1325	7.2	24.5	439
48-59 months	91.8	1088	3.4	23.3	244
Sex of child					
Male	93.3	3339	8.4	25.5	2085
Female	93.7	3151	8.6	26.2	1975
Residence					
Total urban	92.3	1995	6.3	28.8	1184
Major city	91.0	1148	4.1	30.4	669
Other urban	94.1	847	9.1	26.7	515
Rural	94.1	4495	9.4	24.6	2876
Province					
Punjab	93.3	3973	6.8	15.5	2441
Sindh	92.3	1390	12.5	51.4	893
NWFP	96.1	875	8.9	23.4	567
Balochistan	94.5	252	10.5	47.8	159
Education level attended					
No education	94.1	5055	9.2	25.7	3213
Primary	94.3	649	6.4	23.1	373
Middle	90.2	305	3.8	22.5	172
Secondary+	88.5	481	6.6	33.0	301
Assistance at delivery[1]					
Medically trained	92.5	2283	5.9	25.9	1400
Traditional midwife	95.5	3399	10.6	26.4	2155
Other or none	96.9	715	6.4	23.4	474
Place of delivery[1]					
Health facility	88.6	863	6.3	33.8	546
At home	95.6	5538	8.8	24.6	3488
Total	93.5	6490	8.5	25.8	4059

[1]Excludes 94 children and 31 last-born children with missing data on assistance at delivery and 89 children and 25 last-born children with missing data or other responses on place of delivery.

differences may be due to family social status and, to a certain extent, to mother's education rather than cultural norms, which may be more flexible among higher status and more educated women.

An important dimension relating to breastfeeding is the timing of initiation. Though 94 percent of all babies were breastfed at some time, only 9 percent started breastfeeding within the first hour of life.[1] Furthermore, only 26 percent of last-born children were put to the breast within the first day of life. The small percentage initiating breastfeeding during the first hour of life may be due to the social practice of not giving colostrum to newborns. There were no major differentials in initiating breastfeeding on the first day by gender, time since birth, or urban-rural residence. However, there were substantial differences between provinces. For instance, last-born children in Sindh and Balochistan stand a much greater chance of being put to the breast within one day of birth than babies born in Punjab or NWFP. Similarly, infants born to mothers with secondary education or more, and those born in a medical facility have a slightly greater chance of receiving breast milk in the first day of life.

For last-born children who had ever been breastfed, mothers were asked what the newborn had been given to drink before being put to the breast. Table 11.2 shows the percentage of such children who were given various liquids or food items before being put to the breast, according to selected background characteristics. About 30 percent of the babies were given water before breastfeeding was started and similar percentages were given either ghutti or honey. Nineteen percent received milk and 13 percent were given rose water/araq or sugar. No major sex differentials in the intake of various food items were reported by mothers.

For the three main items given to the youngest child, major differences are shown by place of residence. More children living in major cities were given water, ghutti, or honey than children living in other urban or rural areas. A major differential is also observed among provinces. Water was given more often in Balochistan (43 percent) and Sindh (38 percent), while 52 percent of the children were given ghutti and 29 percent received tea in NWFP (Figure 11.1). Similarly, more than half of all children in Sindh (53 percent) were given honey before breastfeeding was started. A significant difference is also seen in giving milk. In Punjab, one-quarter of newborns were given milk before being put to the breast compared to less than 10 percent in other provinces. Giving water and honey before starting breastfeeding is positively correlated with mothers' education, which may also be taken as an indication of easy accessibility of these items to educated mothers.

The presence of a medically trained person at the time of birth of a child and the place of delivery are related to what the newborn was given before breastfeeding was started. Table 11.2 shows that mothers who were assisted in their last birth by medically trained persons were more likely to give their baby various liquids than those who were assisted by traditional midwives. The intake of water and honey is higher for children whose delivery was assisted by traditional midwives or medically trained persons than for other children. Mothers who delivered at a health facility are twice as likely to have given water or honey than mothers who delivered at home. The greater propensity of giving water and honey to children born in health facilities and those assisted by medically trained personnel is related to the popularity of this practice in urban areas.

[1] This information was collected only for the last-born child.

Table 11.2 Liquids and food items given before breastfeeding

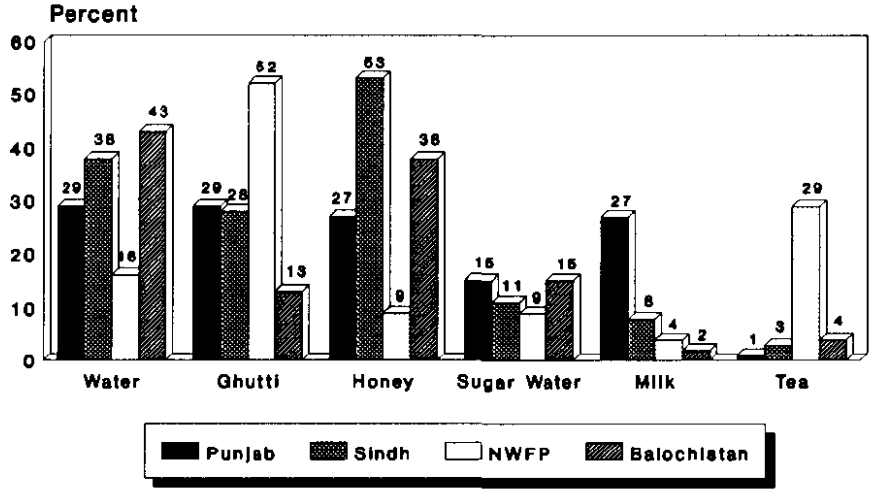
Percentage of last-born children born in the five years preceding the survey who were given liquids or food items before being put to the breast, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Percentage given liquid or food											Number of children
	Water	Ghutti	Honey	Sugar	Milk	Ghee	Butter	Oil	Tea	Araq/ rose water	Other	
Sex of child												
Male	30.3	32.7	29.6	12.6	18.4	3.6	1.2	5.0	5.9	13.6	5.5	1981
Female	28.8	30.6	31.0	13.8	18.8	3.6	1.6	6.4	5.4	11.4	4.8	1870
Residence												
Total urban	47.3	39.2	52.8	11.6	16.0	1.8	0.5	0.9	5.9	9.4	6.4	1111
Major city	57.8	41.5	64.8	10.6	11.5	1.8	0.2	0.7	5.5	7.1	6.8	624
Other urban	33.8	36.2	37.3	12.9	21.8	1.8	0.9	1.1	6.5	12.3	5.9	486
Rural	22.4	28.6	21.2	13.8	19.7	4.4	1.8	7.6	5.5	13.8	4.6	2740
Province												
Punjab	28.7	29.4	26.5	15.1	27.0	4.0	1.4	7.1	1.2	20.7	5.3	2302
Sindh	38.3	28.2	52.9	10.6	8.4	0.6	2.3	0.7	2.8	0.4	5.3	847
NWFP	16.0	51.8	9.0	8.5	3.9	7.5	0.2	8.6	29.0	0.2	2.6	551
Balochistan	42.8	12.8	38.1	15.1	1.8	0.6	1.2	1.5	3.6	0.6	10.7	151
Education level attended												
No education	26.3	30.1	25.1	13.3	18.7	3.9	1.6	6.8	6.2	12.3	4.6	3059
Primary	32.3	37.9	41.8	14.9	18.3	3.3	1.1	2.3	4.7	17.3	5.5	353
Middle	40.3	44.9	48.1	13.6	12.7	2.2	0.6	1.4	3.9	20.6	5.8	165
Secondary+	56.6	33.9	62.5	9.9	21.0	1.6	0.0	0.6	1.6	4.1	10.2	273
Assistance at delivery[1]												
Medically trained	38.0	34.3	43.7	9.5	20.4	1.8	1.1	2.4	4.4	12.7	6.5	1316
Traditional midwife	26.4	29.6	25.5	15.8	19.8	2.8	1.7	6.6	4.0	14.1	4.6	2067
Other or none	20.0	33.3	14.0	11.5	8.4	12.7	1.3	10.1	16.6	4.5	4.0	457
Place of delivery[1]												
Health facility	50.3	31.7	59.7	10.1	14.1	0.6	0.3	0.1	5.1	6.1	9.2	505
At home	26.4	31.7	25.9	13.6	19.3	4.0	1.6	6.5	5.7	13.5	4.5	3341
Total	29.6	31.7	30.3	13.2	18.6	3.6	1.4	5.7	5.6	12.5	5.2	3851

Note: Figures are for last children who were ever breastfed. Percentages add to more than 100.0 because children may have received more than one item.

[1]Excludes 11 children with missing data on assistance at delivery and 5 children with missing data or other responses on place of delivery.

Figure 11.1
Percentage of Children Given Selected Liquids Before Being Put to the Breast by Province



Note: Based on youngest child under age five.

PDHS 1990-91

Another important issue is current nutritional intake. Table 11.3 and Figure 11.2 show liquids and food items given to youngest children during the 24 hours before the interview. Plain water was given to the largest proportion of children (83 percent) followed by solid or mushy food given to 63 percent of children. The intake of the major items consumed (water, fresh milk and solid or mushy food) is positively related to age. Older children are much more likely to be provided with solid or mushy foods than younger children. This is expected since older children have a greater need for solid or mushy food than younger children. The consumption of ghutti, sugar/honey water and gripe water generally declines as children grow older. After the age of six months, a substantial proportion of children start consuming solid food. However, even at age 9-11 months, only a slight majority of children are given any solid or mushy food.

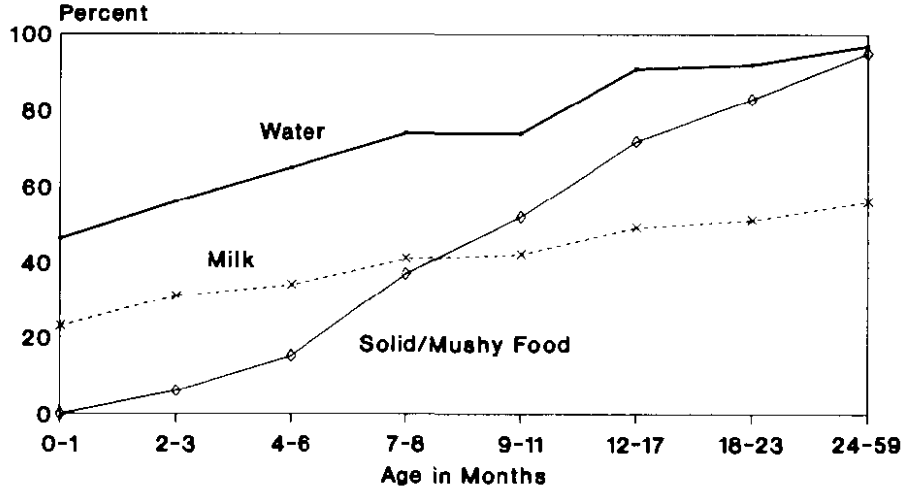
Table 11.3 Nutritional intake

Percentage of youngest living children under age five given various liquids and food items the day before the interview, by age of child and type of liquid or food item, Pakistan 1990-91

Liquid or food	Age of child								Total
	0-1 month	2-3 months	4-6 months	7-8 months	9-11 months	12-17 months	18-23 months	24-59 months	
Plain water	46.3	56.2	65.2	73.8	73.8	91.4	91.5	97.2	83.4
Ghutti	28.8	16.6	11.2	8.6	4.9	2.3	3.3	2.2	6.4
Sugar or honey water	11.6	9.0	6.3	5.4	2.1	2.1	3.1	3.8	4.5
Juice	--	0.4	1.2	5.2	2.9	4.3	10.0	6.8	4.9
Herbal tea	9.1	9.9	8.5	9.9	10.0	14.9	22.2	22.8	16.5
Gripe water	20.7	32.8	38.1	28.6	25.6	20.5	14.8	6.9	18.6
Baby formula	0.4	1.8	3.8	4.0	2.1	3.4	1.5	0.8	2.0
Fresh milk	22.8	30.9	34.4	41.0	42.4	48.5	50.9	56.1	46.4
Tinned/Powdered milk	2.1	2.4	2.7	2.8	2.3	2.4	1.9	1.4	2.0
Other liquid	6.3	9.1	5.0	3.5	6.7	4.9	8.6	7.3	6.6
Any solid or mushy food	0.3	5.5	15.2	36.6	52.0	71.9	83.4	95.2	63.2
Liquid and solid	0.3	5.1	11.9	29.7	39.0	50.3	63.6	69.9	46.6
Number	232	270	368	229	255	700	427	1317	3797

Note: Percentages add to more than 100.0 because children may have received more than one item.
-- Less than 0.05 percent

Figure 11.2
Percentage of Children Given Water, Milk, or Solid/Mushy Food the Day Before the Interview



Note: Based on youngest child under age five.

PDHS 1990-91

All mothers were asked about breastfeeding and food supplementation given to the youngest child in the 24 hours preceding the interview. Table 11.4 and Figure 11.3 show the pattern of current breastfeeding and food supplementation. About 4 percent of all newborns were not being breastfed in their first two months of life. About one-quarter of all infants in the first four months of life were being exclusively breastfed (that is, being fed nothing but breast milk). This percentage drops to 12 percent for children age 8-9 months. More than half of all infants in the same age group were being breastfed and were also receiving liquids or solid supplements other than plain water. In every age group through age 21 months, a majority of children were receiving breast milk and supplementation. Almost 72 percent of children who had just completed their first year of life got food supplementation in addition to breastfeeding, while 14 percent of children in the same age group were not being breastfed at all.

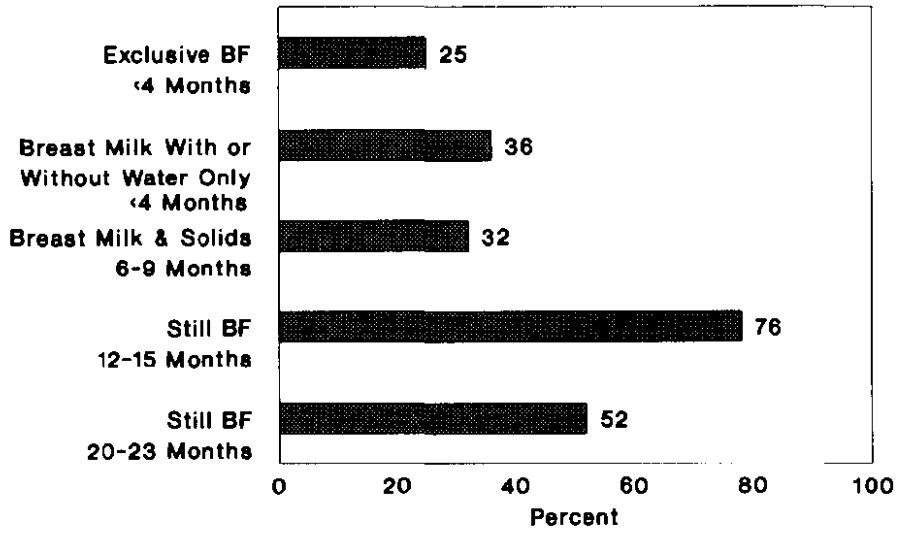
Table 11.4 Breastfeeding and supplementation

Percent distribution of youngest children by breastfeeding status, according to child's age in months, Pakistan 1990-91

	Percentage of youngest living children who are:					
			Breastfeeding and receiving			
Age in months	Not breast-feeding	Exclusively breastfeeding	Plain water only	Supple-ments	Total	Number of children
0-1	4.0	27.2	11.5	57.4	100.0	237
2-3	3.2	23.7	9.7	63.4	100.0	272
4-5	6.6	17.6	11.8	64.0	100.0	253
6-7	11.6	15.7	13.3	59.4	100.0	235
8-9	8.6	11.9	20.5	59.0	100.0	209
10-11	18.4	7.7	8.9	65.0	100.0	164
12-13	14.0	5.2	8.9	71.9	100.0	279
14-15	30.0	2.6	8.2	59.2	100.0	265
16-17	39.5	0.4	2.5	57.5	100.0	184
18-19	40.6	3.2	2.6	53.7	100.0	197
20-21	43.8	3.2	2.2	50.8	100.0	142
22-23	52.7	2.0	4.3	41.0	100.0	148
24-25	67.8	--	2.5	29.7	100.0	184
26-27	78.9	--	1.0	20.2	100.0	196
28-29	80.9	--	1.3	17.8	100.0	200
30-31	79.9	1.7	--	18.4	100.0	190
32-33	75.6	--	--	24.4	100.0	188
34-35	83.8	--	--	16.2	100.0	183

Note: Breastfeeding status refers to last 24 hours.
-- Less than 0.05 percent

Figure 11.3
Breastfeeding among Children
Age 0-23 Months



PDHS 1990-91

Table 11.5 shows in more detail the types of food supplementation received by currently breastfeeding children. The table shows that infant formula was not a major supplement while children were being breastfed. On the contrary, fresh milk is a major component of the diet and its use increases progressively from 23 percent for the youngest infants to over 40 percent for children one to two years of age. Other liquids also form a major component of supplementary food but their use decreases with age. Solids and mushy food items do not become an important part of the diet until at least age six months. The transition to solid and mushy foods as a supplement is quite rapid and almost all children are given these before they complete their third year of life. Nevertheless, according to the mothers' reports, a substantial proportion of breastfeeding children were not receiving solid or mushy food even after they reached their second birthday.

Of particular interest to both demographers and nutritionists is the use of a bottle with a nipple when breastfeeding. Bottle feeding has a direct effect on the mother's exposure to the risk of pregnancy and exposes the child to unhygienic conditions (since it is difficult to properly sterilise the nipple). The PDHS data show that about one-quarter of breastfed children under one year of age were given a bottle with a nipple the day before the interview. This is of great concern since women's amenorrhoeic period is shortened when they provide their children with liquids from bottles with a nipple. Simultaneously, these children are at risk due to the use of unsterilised bottles and the intake of unhygienic liquids.

Table 11.5 Type of supplementation

Percentage of breastfeeding children who are receiving specific types of food supplementation, and the percentage using a bottle with a nipple, according to child's age in months, Pakistan 1990-91

	Among breastfeeding children					
	Percentage receiving					
Age in months	Infant formula	Other milk	Other liquid	Solid/ mushy food	Percentage using a bottle with a nipple	Number of children
0-1	0.4	22.8	51.3	0.4	16.9	228
2-3	1.2	31.8	51.2	5.6	30.8	263
4-5	3.1	33.1	54.6	10.6	29.1	236
6-7	2.8	36.0	48.1	29.9	25.7	208
8-9	2.6	31.7	36.4	34.5	26.2	191
10-11	2.4	42.3	43.0	54.7	23.9	134
12-13	4.8	46.0	31.7	57.1	19.3	240
14-15	1.9	36.8	40.4	70.7	18.6	185
16-17	1.6	36.6	44.1	85.2	5.3	111
18-19	1.6	43.9	41.4	77.7	19.3	117
20-21	1.5	23.1	47.8	75.8	14.3	80
22-23	0.3	38.3	39.6	77.7	6.7	70
24-25	3.7	43.2	56.0	82.7	23.9	59
26-27	(--)	(55.2)	(35.9)	(85.8)	(12.4)	41
28-29	(--)	(39.4)	(37.6)	(87.3)	(11.1)	38
30-31	(1.0)	(53.2)	(23.9)	(89.9)	(18.4)	38
32-33	(--)	(61.5)	(24.2)	(94.0)	(4.9)	46
34-35	(3.9)	(40.7)	(40.8)	(96.2)	(7.8)	30

Note: Figures are for last 24 hours. Percents by type of supplement may sum to more than 100.0 since children may have received more than one type of supplement. Figures in parentheses are based on fewer than 50 unweighted cases.
-- Less than 0.05 percent

The effect of breastfeeding on the mother and child can also be seen by examining the duration and frequency of breastfeeding. The PDHS data show that the median duration of breastfeeding for all children born in the five years preceding the survey was 20 months (Table 11.6). The mean values for breastfeeding calculated directly (19.8 months) or using the prevalence-incidence method (20.2 months) are very close to the median value. The mean duration of exclusive breastfeeding is three months and full breastfeeding is five months.[2] The results suggest that exclusive breastfeeding is not a common practice in Pakistan except in NWFP. There are a number of differentials in breastfeeding. For example, rural mothers tend to breastfeed longer (21 months) than urban mothers (15 months). Male children are not breastfed as long (18 months) as female children (21 months), on the average. More than four-fifths of children less than six months of age were breastfed six or more times on the day preceding the interview. This last finding demonstrates the high intensity of breastfeeding in Pakistan.

[2] The mean duration of full breastfeeding for last-born children in the 1984-85 PCPS was 6.9 months.

Table 11.6 Median duration and frequency of breastfeeding

Median durations of any, exclusive and full breastfeeding and the percentage of children under six months of age who were breastfed six or more times in the 24 hours preceding the interview, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Median duration (in months)[1]			Number of children under 3 years of age	Children under six months	
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding[2]		Breastfed 6+ times in last 24 hours	Number of children
Sex of child						
Male	18.3	0.5	0.6	2142	82.9	395
Female	21.1	0.5	0.6	1935	83.5	366
Residence						
Total urban	14.8	0.4	0.5	1232	82.6	204
Major city	14.4	0.4	0.4	714	82.4	121
Other urban	16.5	(0.5)	0.5	517	82.8	83
Rural	21.0	0.5	0.7	2845	83.4	558
Province						
Punjab	18.0	0.5	0.6	2504	81.7	441
Sindh	22.8	0.4	0.5	874	82.4	179
NWFP	23.0	2.6	3.9	562	90.7	117
Balochistan	*	(0.5)	(0.6)	137	80.6	25
Mother's education level						
No education	21.3	0.5	0.6	3163	83.7	595
Primary	*	*	*	397	82.8	76
Middle	*	*	*	198	(80.9)	32
Secondary+	12.3	*	*	319	79.8	58
Assistance at delivery[3]						
Medically trained	17.9	0.5	0.5	1444	87.4	254
Traditional midwife	20.8	0.5	0.6	2140	81.1	401
Other or none	(24.0)	(0.6)	(0.7)	447	80.4	103
Total	19.9	0.5	0.6	4077	83.2	762
Mean for all children[1]	19.8	2.9	4.9	4077	NA	NA
P/I for all children[4]	20.2	2.5	4.6	4077	NA	NA

Note: Figures in parentheses are based on 25 to 49 unweighted cases.
NA = Not applicable
* Based on fewer than 25 unweighted cases
[1]Median and mean based on current status
[2]Either exclusively breastfed or received only plain water
[3]Excludes 46 children with missing data on assistance at delivery
[4]Prevalence-incidence mean

All mothers with living children born in the five years preceding the survey were asked about the age at which formula or milk other than breast milk, water, other liquids or any food were first given to their children. Table 11.7 and Figure 11.4 show the age at which liquids or foods were fist given to children 24-59 months on a regular basis. One in five children was given formula or milk, and three-fourths were given water in the first two months of life. An important determinant of children's growth is the age at which they start receiving solid or mushy foods. One-quarter of all children started receiving such food on a regular basis at 4-6 months of age and the cumulative percentage rose rapidly at higher ages. About 40 percent of all children were never given formula, milk or other liquids on regular basis, while 17 percent never received solid or mushy food on a regular basis.

Table 11.7 Age at which liquids and foods were introduced

Percent distribution of age at which liquids and foods were given regularly in the first two years of life to children born 24-59 months preceding the survey, Pakistan 1990-91

Age at introduction of liquids/foods	Food given regularly			
	Formula or milk	Water	Other liquids	Solid or mushy food
Never given regularly	38.4	8.1	38.6	17.1
0-1 month	20.9	74.0	25.0	0.5
2-3 months	6.7	6.6	7.6	2.0
4-6 months	11.4	6.7	12.9	27.2
7-11 months	6.7	2.1	8.2	20.5
12-17 months	9.9	1.4	5.3	26.7
18-23 months	5.1	0.2	1.4	5.2
Don't know, missing	0.8	0.9	1.0	0.8
Total	100.0	100.0	100.0	100.0

Note: Figures are based on 3,708 children.

Information was also collected on the reasons for stopping breastfeeding for children age 24-59 months (see Table 11.8). The reason for stopping breastfeeding varies with the age at which breastfeeding was stopped. Less than 18 percent of the children stopped breastfeeding by the sixth month. Among these children, 35 percent of mothers reported that the child died and 15 percent reported their next pregnancy as the main reason for stopping breastfeeding. For children who were not being breastfed by age 6-17 months, the majority of mothers reported that they stopped breastfeeding because they became pregnant again. Mother's illness and the refusal of the child to take the mother's milk were other factors responsible for stopping breastfeeding. In addition, mothers did not have sufficient milk in 6-7 percent of the cases. Besides pregnancy, the other major reason to stop breastfeeding after 17 months of age was that the child had reached the age of weaning.

Figure 11.4
Age at Which Liquids and Solid/Mushy Food Were First Given to Children Age 24-59 Months

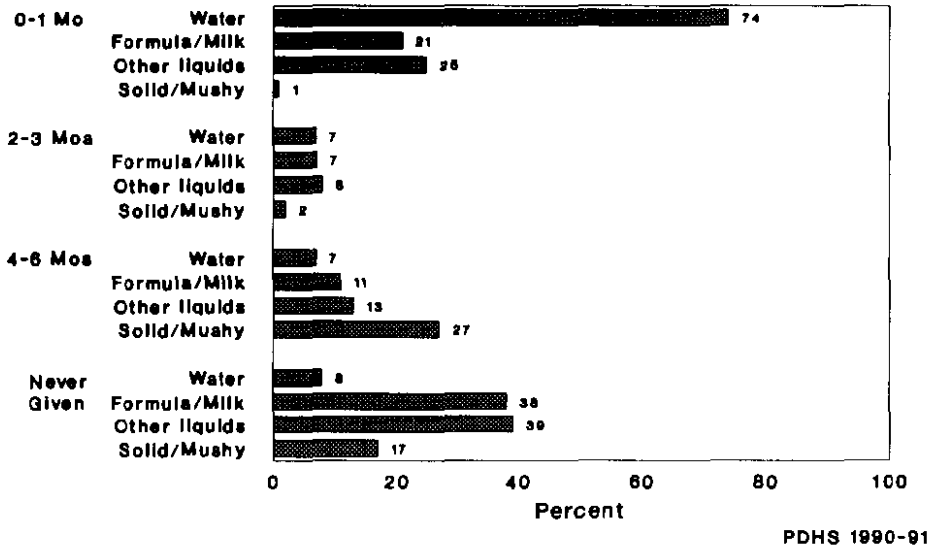


Table 11.8 Reasons for stopping breastfeeding

Percent distribution of reasons for stopping breastfeeding among ever-breastfed children born 24-59 months preceding the survey, who stopped breastfeeding within the first two years of life, Pakistan 1990-91

Age breastfeeding stopped	Mother ill, weak	Child ill, weak	Child died	Nipple, breast problem	No milk	Mother working	Child refused	Weaning age	Became pregnant	Other	Missing	Total	Number stopped breast-feeding
0-5 months	6.6	7.0	34.7	5.6	15.9	0.7	12.6	0.4	14.7	1.6	0.3	100.0	357
6-11 months	8.8	1.7	7.7	3.1	7.4	0.8	9.6	1.4	57.8	1.7	--	100.0	360
12-17 months	5.8	1.4	1.8	1.1	6.1	0.8	8.8	6.1	65.1	1.0	1.9	100.0	644
18-23 months	6.2	1.1	0.1	1.4	5.6	0.8	6.6	23.6	52.1	1.8	0.6	100.0	603
Total	6.6	2.4	8.3	2.4	8.0	0.8	9.0	9.6	50.6	1.5	0.9	100.0	1964

-- Less than 0.05 percent

11.2 Nutritional Status of Children

Assessment of nutritional status and related nutrition information is an important objective of the PDHS. Anthropometric measurements were used to assess growth and nutrition of young children. The measurement of children's height, weight, and arm circumference was undertaken after the children's shoes and clothes were removed. The validity of the anthropometric indices, however, depends on the accuracy of the measurements and the age data collected. Children under five years of age were weighed and measured by interviewers who were given special anthropometric training. They were taught how to weigh children (within 100 grams) using a hanging spring balance scale, and to how to measure the children's height (within 5 millimetres) using a measuring board. In the PDHS, the *height* of a child under 24 months of age was actually *recumbent length*, measured with the child lying down on an adjustable wooden measuring board as recommended by the World Health Organisation (WHO). The same board was used to measure the standing height of older children.

About 80 percent of the 5,776 children born in the period 1-59 months preceding the survey were weighed and measured. The most common reason for non-measurement was cultural. Mothers, particularly in Balochistan and NWFP, did not want strangers to weigh or measure their young children. Another reason was that the child was not present in the home at the time of the interview. Excluded from the analysis are children whose month and year of birth were not reported by the mother, and those with grossly improbable weight or height measurements due to recording error.

The results presented here are based on 4,037 children age 1-59 months. Anthropometric data are particularly sensitive to errors in age reporting. In the survey, age in months was calculated from the information on the child's birth date given by the mother. These data in combination with height and weight information were evaluated using the international reference population of the U.S. National Centre for Health Statistics (NCHS) and the Centres for Disease Control (CDC), as recommended by the World Health Organisation (WHO).[3] The nutritional status of children was evaluated by calculating the extent to which the anthropometric measurements deviate from measurements for the standard population of healthy well-fed children as defined by the NCHS/CDC. Three standard indices have been used to assess nutritional status:

- Height-for-age
- Weight-for-height
- Weight-for-age

Each of these indices provides somewhat different information about the nutritional status of a population of children. During growth, height and weight vary with age, and weight varies with height. Indicators have been developed to standardise the results for children of different ages and heights. Children who are chronically undernourished are short for their age. A child whose height-for-age is below minus two standard deviations (-2 SD) from the median of the reference population is considered *stunted*. Chronic undernutrition is a condition which is typically associated with adverse environmental conditions existing over a long period of time. The weight-for-height index measures acute undernourishment. A child whose weight-for-height falls below minus two standard deviations (-2 SD) from the median of the reference population is classified as *wasted* or acutely undernourished. This condition is usually associated with short-term undernourishment as a result of disease or inadequate food supply or consumption. The weight-for-height index does not include age, and is thus free of bias due to age misreporting. Weight-for-age is a composite measure which captures both acute and chronic undernutrition. Children with a weight-for-age below minus two standard deviations (-2 SD) from the median of the reference popu-

[3] Developed by the U.S. Centres for Disease Control based on data from the U.S. National Centre for Health Statistics (Dibley et al. 1987a, 1987b).

lation are considered *underweight*. Results for each indicator are discussed separately below. In a healthy, well-fed population of children, it is expected that only 2.3 percent of children will fall below minus two standard deviations (-2 SD) from the median of the reference population for each of the three indices. Less than one percent of children are expected to be below minus three standard deviations.

Height-for-age: The results for *stunting* are shown in Tables 11.9 and 11.10 for different demographic and socioeconomic characteristics of the population surveyed. Thirty percent of children under five years of age are below minus three standard deviations (-3 SD) from the median of the reference population and half of the children are below minus two standard deviations (-2 SD) from the median. Thus, half of the children under five years of age are suffering from chronic malnutrition. Sex differences appear to be negligible, however, age is significantly correlated with the prevalence of stunting. Stunting is much less common in the first year of life than at ages 1-4. This indicates that as a child grows, the gain in height is less than the standard performance. There is a marked worsening in nutritional status during the first and second year of life. The degree of stunting does not level off until after age 47 months. Seventeen percent of children under six months of age are classified as stunted compared to over 60 percent of children over three years of age. Birth order shows a positive correlation with the prevalence of stunting. The extent of stunting was also examined by birth interval. As expected, the prevalence of stunting is lower among first-born children and among children born after a long birth interval (over 47 months).

The prevalence of stunting is more prominent in rural areas than in urban areas (see Table 11.10). This difference may be explained by the socioeconomic status of the family and the accessibility of better nutrition and health services for the urban population. Similarly, the prevalence of stunting appears to be associated with the overall level of development of the provinces. The rate is lowest (44 percent) in Punjab, and highest in Balochistan (71 percent), the least developed province. Mother's education is negatively correlated with stunting. The prevalence of stunting is 56 percent among children of mothers with no education and only 18 percent among children whose mothers have at least some secondary education.

Weight-for-height: Children whose weight-for-height is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin or *wasted*. Those who fall below minus three standard deviations (-3 SD) from the median are classified as severely wasted. About 9 percent of children are moderately wasted and less than 2 percent are severely wasted. The prevalence of wasting does not vary substantially between the sexes, although it is slightly higher among boys. The largest differentials in wasting are seen for mothers' education, which is negatively related to wasting. Ten percent of the children of mothers with no education are classified as wasted compared to 4 percent of the children of mothers with at least some secondary school education.

Weight-for-age: The percentage of children classified as *underweight* is also given in Tables 11.9 and 11.10. Forty percent of children are below minus two standard deviations (-2 SD) from the median for the reference population. There is a positive relationship between the age of the child and the prevalence of underweight. The prevalence of underweight children grows dramatically until children reach one year of age (see Figure 11.5). This may be explained by the dependence of infants on breast milk during the first year and inadequate food supplementation thereafter. More than 40 percent of children are underweight for their age between their first and fifth birthdays. The proportion of children who are underweight is similar for males and females. There is some increase in the proportion of underweight children with increasing birth order. This increase may be due to the small amount of food available for allocation to each child in large families and the skewed distribution of food favouring older children. First-born children and children born after a birth interval of more than 47 months are less likely to be underweight than children born after a short birth interval.

Table 11.9 Nutritional status by demographic characteristics

Percentage of children under five years of age classified as undernourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height and weight-for-age by selected demographic characteristics, Pakistan 1990-91

Demographic characteristic	Height-for-age		Weight-for-height		Weight-for-age		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	
Child's age							
<6 months	6.1	16.5	0.8	8.0	4.3	13.8	460
6-11 months	14.6	29.8	2.1	11.4	13.7	34.4	452
12-23 months	30.3	52.2	3.3	10.8	13.0	42.9	847
24-35 months	35.7	56.7	1.1	9.6	19.4	45.8	841
36-47 months	39.2	61.0	2.4	9.1	14.9	45.9	813
48-59 months	39.3	62.8	0.3	6.1	12.4	46.9	625
Child's sex							
Male	29.9	51.0	2.4	10.2	14.0	40.9	2058
Female	30.2	48.9	1.2	8.2	13.4	40.0	1979
Birth order							
1	26.8	45.9	1.6	9.6	10.7	36.6	708
2-3	27.9	47.4	1.9	9.1	12.3	38.2	1304
4-5	30.1	49.8	2.2	8.9	12.7	39.9	972
6+	35.1	56.1	1.4	9.5	18.5	46.3	1053
Birth interval							
First birth	26.7	45.8	1.6	9.6	10.6	36.6	709
<24 months	33.9	53.5	2.0	9.1	14.7	44.3	1042
24-47 months	31.9	51.7	1.7	9.4	14.5	40.9	1663
48+ months	22.7	44.3	1.6	8.5	13.7	37.2	623
Total	30.1	50.0	1.8	9.2	13.7	40.4	4037

Note: Figures are for children born in the period 1-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population.

[1]Includes children who are below -3 SD

Table 11.10 Nutritional status by background characteristics

Percentage of children under five years of age classified as undernourished according to the three anthropometric indices of nutritional status: height-for-age, weight-for-height and weight-for-age by selected background characteristics, Pakistan 1990-91

Background characteristic	Height-for-age		Weight-for-height		Weight-for-age		Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	Percentage below -3 SD	Percentage below -2 SD[1]	
Residence							
Total urban	21.5	40.7	1.1	8.1	9.5	32.5	1394
Major city	18.8	38.3	0.3	7.6	7.9	29.6	811
Other urban	25.2	44.0	2.1	8.7	11.6	36.5	583
Rural	34.6	54.9	2.1	9.8	16.0	44.6	2642
Province							
Punjab	25.7	44.2	2.2	10.2	12.3	37.3	2402
Sindh	35.4	56.0	0.8	8.7	17.3	48.2	938
NWFP	35.8	60.2	1.9	6.7	12.1	38.4	593
Balochistan	50.4	70.8	0.1	6.0	23.7	56.4	104
Mother's education level							
No education	34.5	55.5	2.1	10.3	16.5	44.9	3057
Primary	23.4	43.8	1.7	7.5	7.1	37.1	441
Middle	15.3	33.2	0.6	5.3	5.0	25.8	200
Secondary+	7.7	18.2	--	3.6	2.5	13.0	338
Total	30.1	50.0	1.8	9.2	13.7	40.4	4037

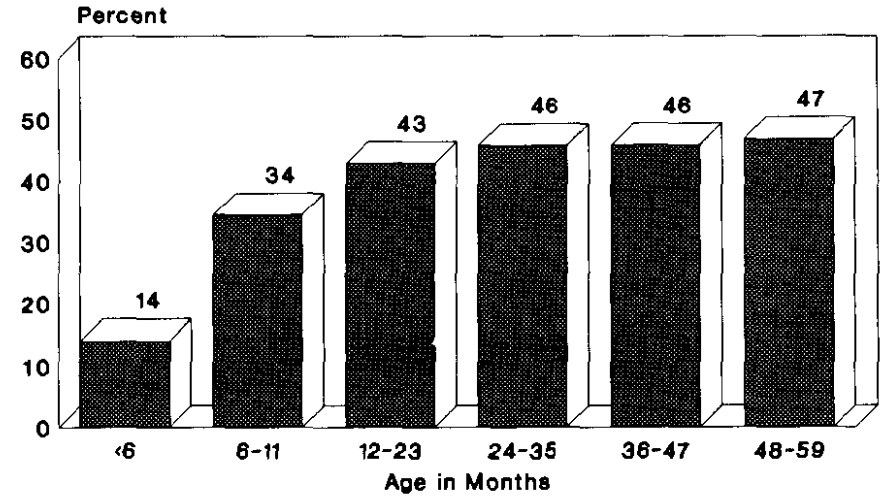
Note: Figures are for children born in the period 1-59 months preceding the survey. Each index is expressed in terms of the number of standard deviation (SD) units from the median of the NCHS/CDC/WHO international reference population.

-- Less than 0.05 percent

[1]Includes children who are below -3 SD

Among the social factors associated with undernutrition, mother's education is negatively correlated with both moderate and severe underweight status in children (Table 11.10). Severe underweight status, i.e., weight-for-age below minus three standard deviations (-3 SD) from the median for the reference population, decreases from 17 percent for children of mothers with no education to 3 percent for those women with at least some secondary school education. With respect to place of residence, major cities have the smallest proportion of underweight children (30 percent); the proportion is higher in other urban (37 percent) and rural areas (45 percent). Similar to the case of stunting, fewer children are underweight in Punjab (37 percent) and more are underweight in Balochistan (56 percent).

Figure 11.5
Percentage of Children Under Five Who Are Underweight by Age



Note: Percentage of children below -2 SD from the median of the international reference population.

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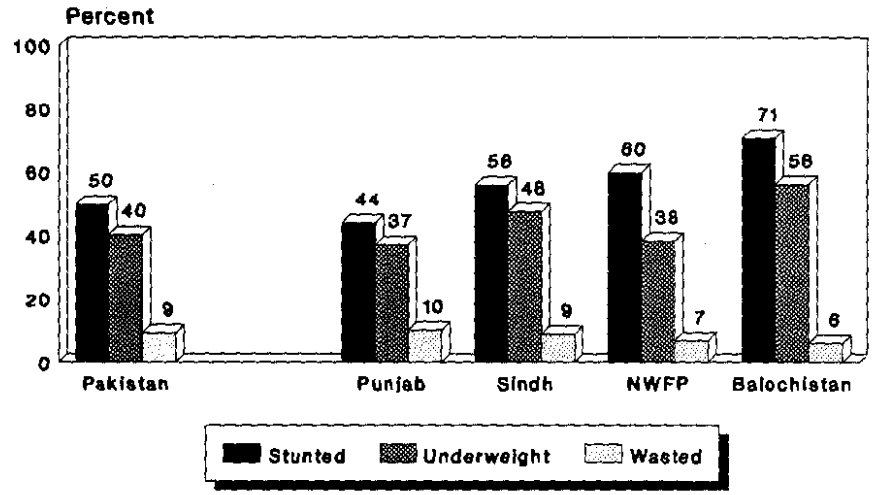
In summary, the nutritional status of children depends on a number factors, beginning with the mother's nutritional status. After birth, breastfeeding practices, socioeconomic and demographic factors, and environmental conditions (e.g., water and sanitation facilities) affect the nutritional status of children. Information on birth weight, breastfeeding, weaning and feeding practices was also gathered in the PDHS, however, an examination of the nutritional consequences of these factors is beyond the scope of this report.

In Pakistan, half of children under five years of age are chronically undernourished (see Figure 11.6). There is a marked deterioration in nutritional status as early as the first year of life. Among the other factors associated with nutritional status, mother's education is the most important, followed by the birth order of the child and place of residence. Children in Balochistan are most likely to be stunted or underweight. Mothers of these children need special education about infant feeding practices and nutritional intake so that they can improve the mental and physical growth of their children.

Arm Circumference

Mid-upper arm circumference is easy to measure and compares favourably to other anthropometric measures for the assessment of the risk of death (Briend et al. 1987). Arm circumference has been adopted as a quick screening method for identifying undernourished children in the 1-5 year age group. If arm circumference is between 12.5 and 13.5 cm, the child is considered to be moderately undernourished; values below 12.5 cm indicate severe undernutrition (Shakir and Morley 1974), although cut-off points may vary between populations (Lindtjorn 1985). In the PDHS, arm circumference was measured for 79 percent of the children under age five. Among the measured children age 1-4 years, 6 percent had an arm circumference of less than 12.5 cm and an additional 12 percent had an arm circumference between 12.5 and 13.5 cm. Therefore, nearly one in every five children was found to be moderately or severely undernourished according to this measure.

Figure 11.6
Undernutrition among Children Under Five Years of Age



Note: Percentage of children below -2 SD from the median of the international reference population.

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CHAPTER 12

HUSBANDS' SURVEY

Sultan S. Hashmi

A systematic subsample of one of every three households in the women's survey was selected to obtain information from the husbands of currently married women 15-49 years of age. The topics covered were: demographic, social and economic background; family planning knowledge, attitudes and practices; and fertility preferences. The questionnaire consisted of a subset of the questions used in the woman's questionnaire (see Appendix D). Only those husbands who had spent the night before the interview in the same household as their wives were interviewed in the survey.

The target for the survey was to interview the husbands of one-quarter of eligible women who had completed interviews. Because it was anticipated that the nonresponse rate would be higher for husbands than for women, one-third of all households (rather than one-quarter) were included in the husbands' subsample. Altogether, 1,757 husbands were identified as eligible, out of which 1,354 were interviewed. The response rate was only 77 percent for eligible husbands compared to 96 percent for eligible women. Nonresponse for husbands was primarily due to the absence of husbands from the household despite repeated visits by the interviewers (at least three visits per household). A small number of the husbands interviewed were married to more than one eligible woman. Therefore, when husbands are matched to their wives, the resulting sample is composed of 1,366 married couples. Consequently, the tables for husbands alone are based on 1,354 cases, whereas the tables for matched couples are based on 1,366 cases.

It is often alleged that in matters relating to family planning, the focus is too often on women, despite the fact that husbands are equal partners in the reproductive process and have greater responsibility for making family decisions. In addition, women often mention their husbands as a constraint on the use of contraception (Population Welfare Division 1986). Therefore, the PDHS included a husbands' survey as an integral part of the project. This is the first time since the 1968 National Impact Survey that men have been interviewed in a nationwide demographic survey.

The information presented in this chapter provides important data on issues relating to the attitude, behaviour and role of husbands with respect to family planning. These results can be useful for the planning of various components of the Population Welfare Programme—in particular, the information, education and communication (IEC) and service delivery components. In this chapter, husbands and wives are compared with respect to background characteristics and their knowledge, attitudes and practices regarding family planning. A more detailed analysis of husband-wife differentials will be published at a later date.

12.1 Background Characteristics

Table 12.1 presents the background characteristics of the husbands who were interviewed. Relatively few husbands were under 25 years of age and less than one percent were under 20. At the upper end of the age range, 17 percent of husbands were 50 years of age and over, while there were no wives beyond age 49 years (due to eligibility requirements). This indicates that many older men are married to women who are younger than themselves.

Table 12.1 *Husbands' background characteristics*

Percent distribution of husbands by selected background characteristics, Pakistan 1990-91

Background characteristic	Weighted percent	Weighted number of husbands	Unweighted number of husbands
Age			
< 20	0.6	8	7
20-24	7.4	100	94
25-29	16.0	216	209
30-34	18.2	246	217
35-39	16.4	223	234
40-44	12.9	175	184
45-49	11.4	154	162
50+	17.2	233	247
Residence			
Total urban	31.9	432	696
Major city	18.4	250	380
Other urban	13.5	183	316
Rural	68.1	922	658
Province			
Punjab	59.2	801	461
Sindh	25.8	350	364
NWFP	11.2	151	313
Balochistan	3.8	52	216
Education level attended			
No education	50.2	680	633
Primary	19.9	269	249
Middle	9.5	128	129
Secondary+	20.4	276	343
Occupation			
Professional, technical	5.3	72	101
Administrative, managerial	0.7	10	16
Clerical	4.2	56	79
Sales	13.4	181	235
Service	4.9	67	97
Agriculture, fishing	38.7	525	363
Production, transportation, labor	28.9	391	402
Not classifiable	3.9	52	61
Total	100.0	1354	1354

The pattern of older men marrying younger women can be seen in Table 12.2 and Figure 12.1. The wife was older than her husband in 5 percent of the cases; however, in the remaining 95 percent of the cases, the husband was the same age as his wife or older. In two-thirds of the cases the husband was older than his wife by 5 years or more and in over one-fourth of cases, the husband was 10 or more years older than his wife. More striking is the proportion of couples in which the husband was older than his wife by 15 or more years (11 percent). The mean difference in ages was nearly seven years in favour of males.

The distribution of husbands by place and province of residence is similar to that of ever-married women, implying that the subsample of husbands was not significantly different from the total sample of female respondents (see Tables 3.9 and 12.1).[1] With respect to education, the husbands were substantially better educated than the women in the PDHS sample of ever-married women. About half of the husbands had been to school, compared to only one-fifth of the women. The gap is even more pronounced at higher levels of education. One-fifth of the husbands had a secondary or higher education, whereas only seven percent of ever-married women had attained that level of education.

The occupations of husbands are presented in Table 12.1. The PDHS occupation distribution conforms generally to the national pattern measured in the 1986-87 Labour Force Survey (Federal Bureau of Statistics 1987). Since 1986-87, there have been minor increases in the professional and technical occupations, sales, production and transportation, and corresponding decreases in agriculture and fishing. This reflects a shift from agricultural to nonagricultural occupations in the four-year period between the two surveys.

[1] It should be noted that this comparison is not based on matched sets of couples. Rather, it is based on a comparison of all interviewed husbands with all ever-married women interviewed in the women's survey.

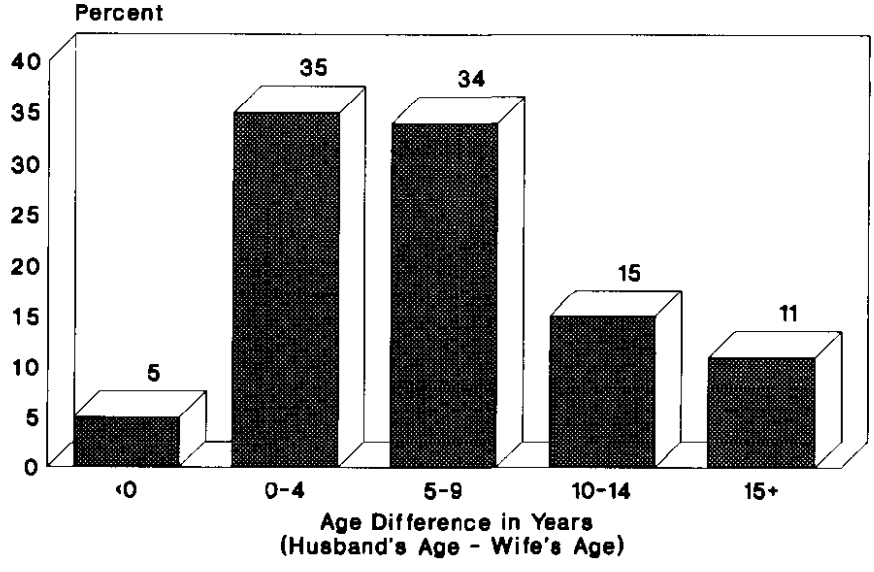
Table 12.2 Age difference between spouses

Percent distribution of the married couples by age difference between spouses and mean age difference between spouses, according to wife's age, Pakistan 1990-91

Wife's age	Husband's age - wife's age (in years)					Total	Mean difference	Number of women
	Negative	0-4	5-9	10-14	15+			
15-19	--	40.7	32.5	15.9	10.9	100.0	7.8	98
20-24	2.1	43.4	30.9	13.0	10.6	100.0	6.7	222
25-29	5.8	37.6	37.2	13.9	5.5	100.0	6.1	306
30-34	6.3	34.8	34.2	15.0	9.7	100.0	6.4	219
35-39	4.7	36.8	32.1	9.7	16.7	100.0	7.3	209
40-44	9.0	21.9	35.2	20.5	13.5	100.0	7.2	180
45-49	9.3	24.9	33.1	23.2	9.5	100.0	6.7	132
Total	5.4	34.9	33.9	15.2	10.5	100.0	6.7	1366

-- Less than 0.05 percent

Figure 12.1
Age Difference Between Husbands and Wives



PDHS 1990-91

In general, younger husbands are better educated than older husbands, although husbands under age 30 are slightly less educated than those age 30-39 (see Table 12.3). Thirty-four percent of the husbands 50 years of age or over had received some education, compared to 49 percent of those age 40-49, 56 percent of those age 30-39 and 52 percent of those under age 30. A similar age pattern is observed with respect to secondary or higher education.

By place of residence, more than two-thirds of husbands in urban areas had received some schooling compared to only 41 percent of rural husbands. Urban-rural differences are particularly pronounced for secondary and higher levels of education. In the urban areas, it would be expected that the highest percentage of educated husbands would be found in the major cities. But Table 12.3 shows that husbands in smaller urban areas were about as well educated as husbands in the major cities. Although the reasons for this phenomenon are not clear, it is possible that the presence of poorly educated rural migrants in the major cities tends to reduce the average level of education in those areas.

Table 12.3 also shows that slightly more than half of the husbands in Punjab and Sindh had some education, whereas somewhat less than half of the husbands in NWFP had received some education. Balochistan stands out as having by far the lowest average level of education. In Balochistan, only one-fifth of the husbands had been to school.

Table 12.3 Husband's level of education

Percent distribution of husbands by level of education attended, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Education level attended: No education	Primary	Middle	Secondary or higher	Total	Number of husbands
Age						
< 30	47.8	18.8	12.7	20.8	100.0	323
30-39	43.5	20.5	10.2	25.7	100.0	468
40-49	50.8	24.0	6.9	18.3	100.0	329
50+	66.4	14.2	7.3	12.1	100.0	233
Residence						
Total urban	31.4	15.2	12.3	41.0	100.0	432
Major city	32.7	13.3	11.3	42.6	100.0	250
Other urban	29.6	17.9	13.8	38.7	100.0	183
Rural	59.1	22.0	8.2	10.8	100.0	922
Province						
Punjab	48.4	18.4	11.9	21.3	100.0	801
Sindh	47.9	26.2	5.6	20.4	100.0	350
NWFP	54.9	18.2	8.0	18.8	100.0	151
Balochistan	81.3	5.3	2.7	10.7	100.0	52
Occupation						
Professional, technical, administrative, managerial	15.4	16.6	7.1	60.9	100.0	82
Clerical	8.3	9.8	17.7	64.2	100.0	56
Sales	32.3	27.0	12.8	27.9	100.0	181
Service	39.4	17.9	6.3	36.4	100.0	67
Agriculture, fishing	68.8	18.2	6.5	6.6	100.0	525
Production, transportation, labor	52.1	22.4	10.3	15.3	100.0	391
Not classifiable	26.3	11.8	20.8	41.1	100.0	52
Total	50.2	19.9	9.5	20.4	100.0	1354

Husbands in white collar professions had received the highest level of education and farmers had the lowest. These differences are notable as they may have important implications for the level of fertility. More than two-thirds of agricultural workers and fishermen had no education. For the white collar occupations, it is surprising that one in six professional and technical workers and one in twelve clerical workers had no formal education.

12.2 Knowledge and Use of Contraception

About four-fifths of husbands knew of at least one method of contraception, two-thirds knew a source from which to obtain a contraceptive method, one-fourth reported that they or their spouses had used contraception sometime in the past and about one in seven were current users (see Table 12.4). Knowledge of modern methods was highest for female sterilisation (66 percent), followed by condoms (59 percent), the pill (55 percent), and injection (50 percent). The least known methods were male sterilisation (32 percent), the IUD (29 percent), and vaginal methods (13 percent). Knowledge of traditional methods (49 percent) was far less widespread than knowledge of modern methods (78 percent).

Knowledge of a source for obtaining a method (65 percent) was significantly lower than knowledge of the methods themselves (79 percent). This suggests the need for improving knowledge about family planning sources, which means strengthening the information and motivation components of the family planning programme.

Table 12.4 Knowledge and use of contraception

Percentage of husbands knowing any contraceptive method, the percentage knowing a source for a method, and the percentage who have ever used and are currently using a method, by specific method, Pakistan 1990-91

Contraceptive method	Know any method			Know a source for method	Ever used	Currently using
	Total	Unprompted	Prompted			
Any method	79.3	50.8	28.5	65.1	24.7	15.1
Any modern method	77.7	48.4	29.4	62.4	18.2	10.1
Pill	54.9	24.1	30.8	37.6	4.6	0.8
IUD	28.6	6.8	21.8	20.9	2.9	1.4
Injection	50.0	19.5	30.5	36.9	2.9	0.5
Vaginal method	12.6	3.2	9.4	10.4	0.4	--
Condom	58.8	32.3	26.4	50.1	12.1	3.6
Female sterilisation	65.7	26.1	39.6	48.6	4.0	3.8
Male sterilisation	31.7	9.3	22.4	22.7	0.1	--
Any traditonal method	49.4	13.2	36.2	NA	15.7	5.0
Periodic abstinence	38.9	7.1	31.7	27.7	11.7	3.2
Withdrawal	39.9	8.5	31.3	NA	8.3	1.7
Other	1.6	1.6	NA	NA	0.3	0.2

Note: Figures are for 1,354 husbands.
-- Less than 0.05 percent
NA = Not applicable

The pattern of ever use and current use of contraception reported by husbands is also shown in Table 12.4. The most common current method reported by husbands is female sterilisation, followed closely by condoms and periodic abstinence. No other method was reported by more than two percent of husbands. The use of traditional methods, as reported by the husbands, is substantial; one-third of current users were relying on such methods. Since traditional methods are far less reliable than modern methods, an important goal of the family planning programme should be to shift users of traditional methods to more effective methods.

Table 12.5 and Figure 12.2 compare the contraceptive knowledge of husbands and wives. The proportion of couples in which both the husband and the wife had no knowledge of contraception was quite small (only 9 percent). Among the remaining couples, at least one spouse had knowledge of some method. For more than 60 percent of couples, both spouses knew one or more modern methods of family planning. The best known modern method for both husbands and wives was female sterilisation, while vaginal methods and male sterilisation were least well known. The second and third best known methods were the pill and injection, respectively. Male methods were more likely to be known by husbands and female methods were more likely to be known by wives.

Table 12.5 Knowledge of contraception among couples

Knowledge of contraception among married couples by specific method, Pakistan 1990-91

Contraceptive method	Both know method	Husband knows, wife does not know	Wife knows, husband does not know	Neither knows	Total
Any method	62.1	17.2	12.0	8.7	100.0
Any modern method	61.3	16.4	13.2	9.0	100.0
Pill	40.9	14.1	20.8	24.2	100.0
IUD	20.1	8.3	30.6	41.0	100.0
Injection	36.4	13.8	23.2	26.6	100.0
Vaginal method	3.2	9.3	8.8	78.8	100.0
Condom	25.6	32.8	7.1	34.5	100.0
Female sterilisation	50.8	14.8	19.0	15.4	100.0
Male sterilisation	9.0	22.7	9.5	58.8	100.0
Any traditional method	14.2	35.1	8.9	41.8	100.0
Periodic abstinence	10.0	28.8	7.0	54.1	100.0
Withdrawal	8.2	31.4	5.8	54.6	100.0
Other	0.4	1.2	2.3	96.1	100.0

Note: Figures are for 1,366 couples.

Figure 12.2
Percentage of Couples in Which Both the Husband and Wife Know Specific Contraceptive Methods

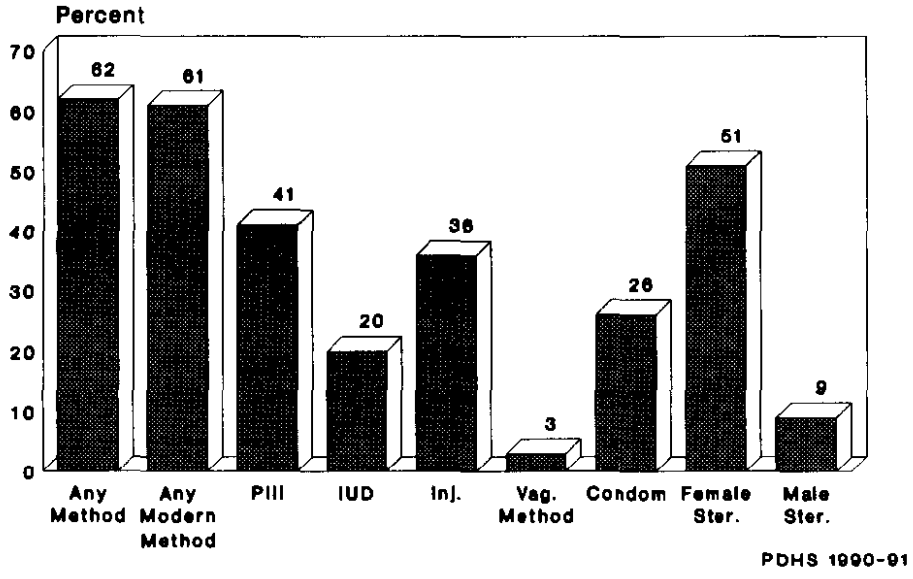


Table 12.6 presents knowledge and use of modern contraception among husbands by background characteristics. Husbands residing in major cities and other urban areas were more likely to know about modern methods and the source for obtaining methods than husbands residing in rural areas. The same pattern is observed with regard to ever use and current use of contraception, with the highest level of use reported in major cities.

Differences among provinces with respect to knowledge of contraception are negligible. In every province, more than three-quarters of husbands reported some knowledge of modern family planning methods (Figure 12.3). Differences in knowledge of a source for a modern method, and differences in ever use and current use of modern methods are more pronounced. Husbands in Punjab and Sindh had more knowledge of family planning sources as well as higher ever-use and current use levels than husbands in NWFP and Balochistan. Husbands in Balochistan (which is less developed and sparsely populated) had very low levels of ever use and current use of contraception. The level of education has a strong positive association with all of the family planning indicators (see Table 12.6). The differences are particularly pronounced between husbands who had no education or had received a primary school education and those who had a middle school or higher education.

Knowledge of contraception is uniformly high, irrespective of the number of living children, ranging from 71 percent for husbands who had no living children to 84 percent for those who had two living children. Regarding the source of contraception, except for those with no living children, the contraceptive knowledge of husbands varies within a narrow range from 62 percent for those who had five living children to 68 percent for those who had three living children. Regarding ever use and current use of contraception, there is a positive relationship between the number of living children and use, except for husbands with six or more living children.

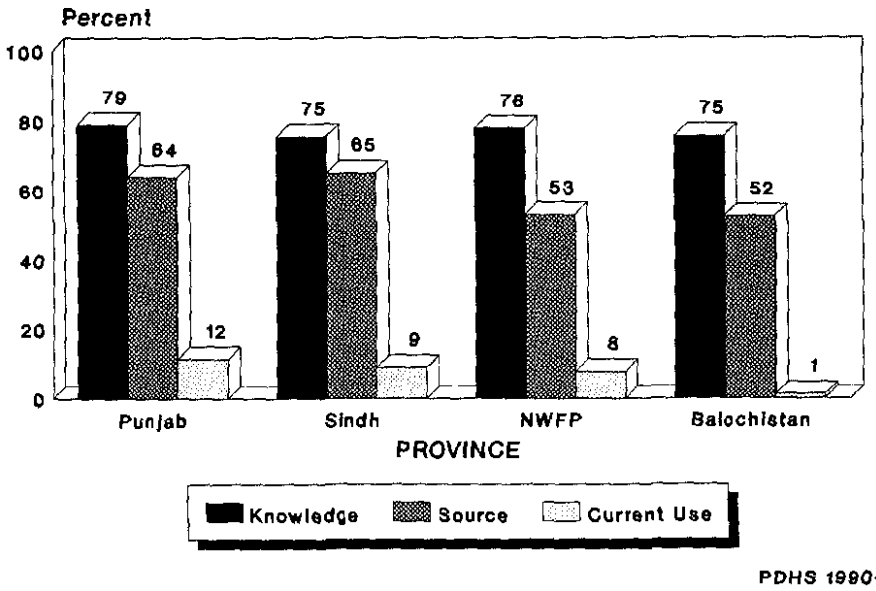
Table 12.6 Knowledge and use of modern contraceptive methods

Percentage of husbands knowing at least one modern method, the percentage knowing a source for a modern method, and the percentage who have ever used and are currently using a modern method, according to selected background characteristics, Pakistan 1990-91

Background characteristic	Know a modern method			Know source for modern method	Ever used modern method	Currently using modern method	Number of husbands
	Total	Unprompted	Prompted				
Residence							
Total urban	87.2	59.4	27.8	80.5	36.9	18.9	432
Major city	87.5	53.4	34.1	81.7	41.8	20.5	250
Other urban	86.7	67.6	19.2	78.9	30.1	16.6	183
Rural	73.3	43.2	30.1	54.0	9.4	5.9	922
Province							
Punjab	78.9	47.8	31.1	63.8	19.9	11.5	801
Sindh	75.4	49.2	26.2	64.9	18.3	9.1	350
NWFP	77.8	53.8	24.0	52.8	14.1	7.8	151
Balochistan	75.4	35.2	40.2	52.2	2.4	1.3	52
Education level attended							
No education	68.6	34.9	33.7	45.9	9.8	5.4	680
Primary	75.1	49.4	25.7	64.0	12.9	6.9	269
Middle	94.6	66.1	28.6	82.7	31.6	19.0	128
Secondary +	95.0	72.2	22.7	92.1	37.7	20.5	276
Number of living children[1]							
0	71.2	40.3	30.9	43.4	2.4	--	159
1	76.7	47.7	29.0	64.8	5.6	2.4	164
2	84.2	56.4	27.8	67.1	20.9	9.3	122
3	79.3	50.2	29.0	68.1	21.3	6.9	176
4	80.9	47.2	33.7	67.0	21.9	14.2	239
5	73.1	55.0	18.0	61.6	30.0	21.0	149
6+	78.3	46.6	31.7	62.9	21.3	12.7	344
Fertility desires[2]							
Want more children	77.4	46.0	31.4	58.9	10.1	4.0	581
Want no more children	83.0	59.2	23.8	73.5	27.5	12.4	393
Say wife can't get pregnant	(57.7)	(34.2)	(23.6)	(52.9)	(21.4)	(6.4)	43
Up to Allah	68.4	29.7	38.7	45.2	5.8	3.1	238
Undecided/don't know	(77.5)	(50.0)	(27.5)	(64.9)	(5.0)	(2.8)	43
Sterilised	(100.0)	(85.6)	(14.4)	(100.0)	(100.0)	(100.0)	52
Total	77.7	48.4	29.4	62.4	18.2	10.1	1354

Note: Figures in parentheses are based on 25 to 49 unweighted cases.
-- Less than 0.05 percent
[1]Excludes 8 husbands with an unknown number of living children
[2]Excludes 9 husbands with missing information on fertility desires

Figure 12.3
Knowledge of Modern Contraceptive Methods, Knowledge of Sources and Current Use among Husbands by Province



Among husbands who said they did not want any more children, 83 percent knew at least one modern method of contraception and 74 percent knew a source for obtaining contraception. Only 12 percent, however, reported that they were currently using a method. This wide gap suggests that the family planning needs of respondents are not being met.

One way of evaluating the reliability of responses on current contraceptive use is to compare information supplied by husbands and their wives (see Table 12.7). In the aggregate, there is excellent agreement on the use of modern methods of contraception—10 percent of husbands say they are currently using a modern method compared to 10.3 percent of wives. On the other hand, husbands are almost twice as likely to report current use of a traditional method of family planning. For individual couples, reporting of current contraceptive use is also more reliable for modern methods than for traditional methods.

Table 12.7 Current use of contraception reported by couples

Percent distribution of married couples by wife's reported current use of contraception, according to the husband's reported current use of contraception and type of method, Pakistan 1990-91

Husband's reported use of contracetpion	Wife's reported use of contraception: Currently using: Any method	Modern method	Traditional method	Not currently using	Total	Percent	Number of husbands
Currently using any method	66.3	55.6	10.7	33.7	100.0	14.9	204
Modern method	84.9	78.9	6.0	15.1	100.0	10.0	136
Traditional method	29.2	9.1	20.1	70.8	100.0	5.0	68
Not currently using	3.7	2.4	1.3	96.3	100.0	85.1	1162
Total	13.1	10.3	2.7	86.9	100.0	100.0	1366

12.3 Prospective Users

Husbands who were nonusers of contraception were asked about their intended future use of contraception and their method preference. A large majority of husbands did not intend to use contraception at any time in the future. The major reason for not intending to use (cited by 47 percent of husbands) was the desire for more children (see Table 12.8). For 18 percent, religious constraints were the main factor, while 11 percent lacked knowledge of family planning. Another 5 percent gave a fatalistic response and the same percentage reported that they did not need contraception since they or their wives were sterile. There were differences in the reasons given for not intending to use contraception among younger and older men. For men under age 30, the overriding reason was the desire for more children; for men age 30 and over, the reasons were more varied and perceived religious prohibitions on family planning were a major consideration.

Table 12.8 Reasons for not intending to use contraception

Percent distribution of main reasons for not intending to use contraception among non-contracepting husbands who do not intend to use in the future, according to age, Pakistan 1990-91

Main reason for not intending to use	Age		Total
	<30	30+	
Want children	80.9	35.3	46.8
Lack of knowledge	5.8	12.2	10.6
Wife opposed	--	0.6	0.5
Costs too much	--	1.5	1.1
Worry about side effects	0.4	2.4	1.9
Health concerns	0.6	1.2	1.0
Hard to get methods	--	0.6	0.4
Religion	8.3	21.8	18.4
Opposed to family planning	0.6	2.0	1.6
Fatalistic	1.6	5.9	4.8
Infrequent sex	--	4.2	3.2
Hard for wife to get pregnant	0.8	5.8	4.6
Wife menopausal, had hysterectomy	--	2.1	1.6
Inconvenient	--	0.2	0.2
Other	0.5	3.3	2.6
Don't know, missing	0.5	1.0	0.8
Total	100.0	100.0	100.0
Number	213	633	846

-- Less than 0.05 percent

About 15 percent of all husbands were not using contraception but intended to adopt family planning in the future. Three-fourths of these husbands wanted to start using contraception within the next 12 months (see Table 12.9). The contraceptive methods preferred by those who intended to use during the next 12 months were female sterilisation (22 percent), condoms (21 percent) and injection (13 percent). About one-fifth of this group wanted to use traditional and other methods, while 14 percent were undecided. None of the husbands mentioned male sterilisation as their preferred method. Among those who intended to use contraception after more than one year, 46 percent wanted to use either injection, condoms or female sterilisation, but 41 percent did not know what method they preferred to use.

Table 12.9 Preferred method of contraception for future use

Percent distribution of contraceptive methods preferred by non-contracepting husbands who intend to use in the future, according to their intended timing of future use, Pakistan 1990-91

Contraceptive method	Intends to use: In next 12 months	Intends to use: After 12 months	Total
Pill	9.0	3.9	7.7
IUD	1.2	--	0.9
Injection	12.5	17.4	13.7
Condom	20.8	15.3	19.4
Female sterilisation	22.3	13.3	20.0
Periodic abstinence	12.3	--	9.2
Withdrawal	3.0	6.7	3.9
Other	4.8	2.3	4.2
Don't know	14.2	41.0	21.0
Total	100.0	100.0	100.0
Number	149	51	200

-- Less than 0.05 percent

12.4 Approval of Family Planning

Husbands as well as wives were asked about their approval of family planning and their perceptions about their spouses' attitudes toward family planning (see Tables 12.10 and 12.11). Overall, the majority of husbands (56 percent) approve of family planning, but a substantial minority (43 percent) disapprove. Wives have a more favourable attitude toward family planning than their husbands. Twice as many wives approve of family planning as disapprove. Since husbands usually have a predominant role in family decision making, the family planning programme should increase efforts to educate and motivate husbands.

Forty-three percent of the husbands thought that their wives approved of family planning, 20 percent thought that they did not approve and 33 percent did not know whether their wives approved or not. For the first two categories, the husbands' perceptions about their wives' attitudes were correct in most of the cases. In cases in which husbands did not know their wives' opinions, 54 percent of wives actually approved of family planning and 45 percent disapproved.

Wives were somewhat less knowledgeable about their spouse's opinion of family planning than were husbands. Specifically, husbands are more favourable toward family planning than their wives believe. In one-third of the cases in which the wife thinks her husband disapproves of family planning, the husband actually approves. Under such circumstances, improved communication between spouses may engender more favourable attitudes toward family planning overall.

Table 12.10 Wife's perception of husband's attitude toward family planning

Percent distribution of married couples by husband's reported approval or disapproval of family planning, according to wife's perception of husband's approval or disapproval, Pakistan 1990-91

Wife's perception of husband's opinion	Husband's opinion: Husband approves	Husband disapproves	Don't know, missing	Total	Percent	Number of wives
Wife thinks husband approves	93.1	6.6	0.3	100.0	29.7	406
Wife thinks husband disapproves	31.5	68.0	0.5	100.0	33.5	457
Wife doesn't know husband's opinion	42.7	56.3	1.0	100.0	32.6	445
Missing	93.0	7.0	--	100.0	4.2	58
Total	56.1	43.3	0.6	100.0	100.0	1366

-- Less than 0.05 percent

Table 12.11 Husband's perception of wife's attitude toward family planning

Percent distribution of married couples by wife's reported approval or disapproval of family planning, according to husband's perception of wife's approval or disapproval, Pakistan 1990-91

Husband's perception of *wife's opinion*	Wife's opinion: Wife *approves*	Wife *disapproves*	Don't know, *missing*	*Total*	*Percent*	Number of *husbands*
Husband thinks wife approves	95.6	3.6	0.8	100.0	43.1	589
Husband thinks wife disapproves	20.1	79.1	0.9	100.0	20.2	276
Husband doesn't know wife's opinion	53.7	44.9	1.4	100.0	32.7	447
Missing	93.0	4.9	2.1	100.0	4.0	54
Total	66.5	32.4	1.0	100.0	100.0	1366

12.5 Acceptability of Media Messages

Husbands were asked if they had heard a message about family planning on radio or television during the month preceding the survey and whether that message was effective in persuading couples to use family planning. In addition, husbands were asked whether or not they found it acceptable for family planning messages to be provided on radio or television. Table 12.12 shows that 64 percent of husbands reported that it was acceptable to have such messages broadcast on radio or television. The acceptability of electronic mass media messages is higher among younger men and those who live in urban areas. Among the provinces, the acceptability was highest in Punjab (68 percent) and Sindh (65 percent), followed by Balochistan (54 percent) and NWFP (47 percent). Generally, there is a positive association between the acceptability of media messages and the level of education.

Table 12.12 Acceptability of mass media messages on family planning

Percentage of husbands who believe that it is acceptable to have messages about family planning on the radio or television by age and selected background characteristics, Pakistan 1990-91

Background characteristic	Age			Total
	<30	30-39	40+	
Residence				
Total urban	82.4	79.9	71.6	76.8
Major city	85.3	85.4	69.5	79.1
Other urban	76.5	72.3	73.9	73.8
Rural	65.3	55.7	56.5	58.4
Province				
Punjab	74.6	66.2	65.1	67.7
Sindh	70.7	67.2	60.3	65.3
NWFP	61.3	39.1	46.9	47.3
Balochistan	31.6	71.3	55.3	54.4
Education level attended				
No education	57.7	54.3	51.5	53.8
Primary	79.4	51.9	65.7	63.9
Middle	(82.8)	(83.8)	(83.1)	83.3
Secondary+	83.1	80.1	82.6	81.7
Total	70.3	63.6	61.5	64.3

Note: Figures in parentheses are based on 25 to 49 unweighted cases.

Although the majority of husbands were favourable toward having family planning messages broadcast on radio or TV, only 40 percent of the husbands interviewed had actually heard such a message in the last month. Of the latter, 44 percent lived in urban areas and 56 percent lived in rural areas. Most of the husbands, irrespective of residence, thought that the family planning messages were effective (see Table 12.13). A larger percentage of those residing in major cities (88 percent) than those residing in other urban areas (78 percent) or rural areas (75 percent) thought that the messages were effective. Among the provinces, husbands residing in Punjab (84 percent) were more likely to think the messages were effective than those in Sindh (80 percent), Balochistan (60 percent) and NWFP (56 percent). A substantial percentage of husbands in NWFP (29 percent) and in Balochistan (28 percent) thought that the messages were ineffective. This suggests that attempts should be made to modify family planning messages in NWFP and Balochistan to make them more acceptable to the local population. The perceived effectiveness of family planning messages was high in all education groups and was not related to the husband's educational attainment.

Table 12.13 Perceived effectiveness of mass media messages on family planning

Among husbands who have heard a radio or television message about family planning, the percent distribution of perceived effectiveness of the message in persuading couples to use family planning by background characteristics, Pakistan 1990-91

Background characteristic	Perceived effectiveness of mass media family planning messages				Total	Number of husbands
	Effective	Not effective	Don't know	Missing		
Residence						
Total urban	84.1	11.5	3.7	0.7	100.0	239
Major city	87.5	10.9	1.5	0.1	100.0	156
Other urban	77.7	12.5	7.8	1.9	100.0	83
Rural	75.3	12.7	11.0	1.0	100.0	300
Province						
Punjab	83.7	7.5	8.8	--	100.0	282
Sindh	79.9	13.7	4.5	1.9	100.0	194
NWFP	55.8	28.6	14.3	1.2	100.0	51
Balochistan	59.6	27.6	8.2	4.5	100.0	12
Education level attended						
No education	77.9	11.3	8.5	2.3	100.0	197
Primary	81.1	7.4	11.5	--	100.0	100
Middle	75.6	13.1	11.1	0.2	100.0	71
Secondary +	81.0	15.5	3.4	0.1	100.0	171
Total	79.2	12.1	7.8	0.9	100.0	539

-- Less than 0.05 percent

12.6 Fertility Desires and Sex Preference for Children

Husbands were asked about the number and gender of their living children and their desire for more children. Table 12.14 shows that 21 percent of husbands wanted another child soon (within two years). This desire is inversely associated with the number of living children. Another 20 percent wanted another child later. The largest proportion of husbands (29 percent) did not want any more children at all. The desire to stop having children is positively associated with the number of living children. The percentage of husbands who want no more children is much larger than the 15 percent of husbands who reported current use of contraception. If those who wanted to postpone having another child are combined with those who did not want any more, the sum would constitute about half of all husbands. This suggests that there is an ample need for family planning, but that motivational programmes and service delivery are not keeping pace with the need.

Table 12.14 Reproductive intentions

Percent distribution of husband's desire for more children, according to number of living children, Pakistan 1990-91

Desire for children	Number of living children[1]								Total[2]
	0	1	2	3	4	5	6	7+	
Want another soon[3]	67.4	41.5	27.9	19.3	14.2	8.5	8.8	4.1	21.4
Want another later[4]	16.5	40.1	35.4	30.7	16.4	12.2	8.5	4.9	19.8
Want another, undecided when[5]	2.9	1.2	2.0	1.5	3.9	0.1	1.8	0.3	1.6
Undecided	--	0.1	2.9	3.3	3.0	2.4	8.9	4.7	3.2
Up to Allah	8.4	14.8	15.0	19.1	26.5	16.5	17.4	17.6	17.6
Want no more	--	1.3	15.9	23.3	28.0	48.9	42.5	54.9	29.0
Sterilised	--	--	0.8	0.4	3.2	7.5	7.3	8.9	3.8
Declared infecund	4.4	1.0	--	2.3	4.4	3.4	4.4	4.6	3.2
Missing	0.5	--	--	0.2	0.5	0.5	0.3	--	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	120	170	133	172	216	182	138	221	1354

-- Less than 0.05 percent
[1]Includes current pregnancy
[2]Total includes two husbands whose number of living children is unknown
[3]Wants next birth within two years
[4]Wants next birth after two or more years
[5]Includes timing up to Allah and other non-numeric responses

Table 12.15 Desire to limit future births

Percentage of husbands who want no more children, by number of living sons and daughters, Pakistan 1990-91

Number of living sons	Number of living daughters				Total
	0	1	2	3+	
0	--	--	(11.0)	(11.4)	2.4
1	5.7	16.0	23.5	24.4	16.7
2	(26.7)	31.8	42.2	53.6	41.3
3+	(27.5)	58.4	66.0	59.1	57.1
Total	8.6	30.2	45.3	46.2	32.8

Note: Women who have been sterilised are considered to want no more children.
Figures in parentheses are based on 25 to 49 unweighted cases.
-- Less than 0.05 percent

Table 12.15 presents husbands' desires to stop having children by the number of living sons and daughters. At each parity the proportion of husbands who want to stop having children increases with the number of living sons in the family. This pattern suggests there is a continuing preference for sons in Pakistan. At the higher parities, there is also some evidence of a desire to have at least one daughter.

In Table 12.16 and Figure 12.4, husbands and wives are compared with respect to their desire for more children. Among couples without children or with only one child, in at least four-fifths of the cases both the husband and wife want more children. The desire of couples for more children decreases as the number of children increases. For couples with two or more children, there is considerable disagreement about the desire to have more children. For example, for couples with three children, in 17 percent of the cases the husband wants to have more children while the wife does not. Couples with three to five children are least likely to agree on whether or not to have another child.

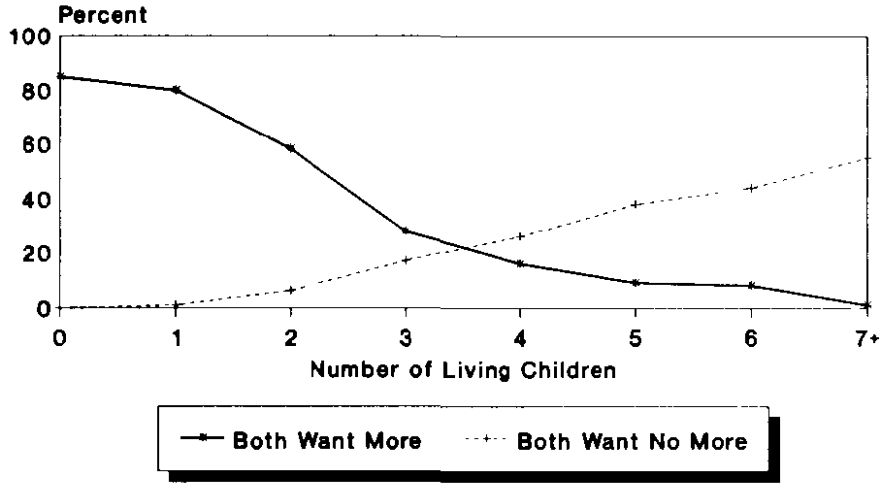
Table 12.16 Desire for more children by wives and their husbands

Percent distribution of couples by number of living children, according to desire for more children, Pakistan 1990-91

Number of living children[1]	Husband wants more			Husband wants no more			Husband says up to Allah			One or both undecided/ missing/wife can't get pregnant	Total	Percent who agree	Number of husbands
	Wife wants more	Wife wants no more	Wife says up to Allah	Wife wants more	Wife wants no more	Wife says up to Allah	Wife wants more	Wife wants no more	Wife says up to Allah				
0	84.7	2.0	0.8	--	--	--	5.1	--	3.1	4.3	100.0	87.8	122
1	79.7	2.5	5.0	--	0.6	0.7	8.9	--	0.5	2.1	100.0	80.8	171
2	57.5	6.8	4.8	6.6	6.3	1.5	4.0	2.3	5.0	5.1	100.0	68.8	137
3	27.5	16.9	4.9	3.2	16.7	2.0	4.8	9.4	3.9	10.7	100.0	48.1	174
4	15.5	12.1	7.8	1.9	25.8	2.3	9.8	10.8	3.6	10.4	100.0	44.9	217
5	8.5	8.4	4.5	14.7	37.5	3.8	2.9	6.5	5.0	8.4	100.0	51.0	183
6	8.3	3.1	7.3	1.2	43.5	3.7	3.5	8.5	5.6	15.3	100.0	57.4	140
7+	1.3	6.3	2.3	0.8	55.0	5.9	2.7	9.1	4.1	12.4	100.0	60.4	221
Total[2]	31.5	7.7	4.8	3.6	25.3	2.7	5.3	6.4	3.8	8.9	100.0	60.6	1366

-- Less than 0.05 percent
[1]Includes current pregnancy reported by husband
[2]Total includes two husbands whose number of living children is unknown.

Figure 12.4
Desire for More Children among Husbands and Wives by Number of Living Children



Note: Number of living children includes current pregnancy.

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12.7 Ideal Number of Children for Husbands and Wives

Husbands as well as wives were asked about their ideal number of children and the results are presented in Table 12.17. About 60 percent of both husbands and wives said that the ideal number of children is up to Allah. Aside from the non-numeric responses, there is little agreement between husbands and wives about the exact number of children that would be considered ideal. For example, among women whose ideal was three children, 21 percent of their husbands also wanted three children but 17 percent of their husbands wanted fewer than three children and 18 percent wanted more than three. Overall, less than 10 percent of couples agree on a specific number of children that would be ideal for them (although the figure increases to 23 percent if only numeric responses are considered). Few couples believe that an ideal family would consist of a small number of children.

Table 12.17 Ideal number of children of wives and their husbands

Percent distribution of husband's ideal number of children, according to wife's ideal number of children, Pakistan 1990-91

Wife's ideal number of children	Husband's ideal number of children							
	2 or fewer	3	4	5+	Up to Allah	Other non-numeric response	Total	Number of women
2 or fewer	18.5	24.3	12.0	5.4	37.2	2.6	100.0	65
3	16.6	21.3	14.5	3.4	42.5	1.8	100.0	89
4	8.1	7.4	27.4	13.0	42.0	2.1	100.0	263
5+	2.7	3.4	14.1	15.8	62.0	1.9	100.0	135
Up to Allah/other non-numeric response	1.7	3.9	11.5	7.8	73.1	1.9	100.0	815
Total	4.8	6.6	15.0	9.3	62.3	1.9	100.0	1366
Number of husbands	66	90	206	126	852	27	1366	1366

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APPENDIX A

PAKISTAN
DEMOGRAPHIC AND HEALTH SURVEY
STAFF

APPENDIX A

PAKISTAN DEMOGRAPHIC AND HEALTH SURVEY STAFF

Dr. M. S. Jillani
(Project Director)

Dr. Tauseef Ahmed
(Principal Investigator)

Syed Mubashir Ali
(Deputy Principal Investigator)

Mr. Mehboob Sultan
(Field Coordinator)

Mr. Mansoor-ul-Hassan Bhatti
(Field Coordinator)

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Principal Investigator (PDHS, NIPS, Islamabad)	Member/Secretary

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Dr. Nasra M. Shah (Resident Coordinator, NIPS)
Ms. Jeanne Cushing (Data Processing Coordinator, DHS, IRD/Macro International)
Dr. S. S. Hashmi (Resident Advisor, NIPS)

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Ms. Surraya Begum (Interviewer)
Mr. Liaqat Ali Khan (Interviewer)
Mr. Amir Khan (Driver)
Mr. Zahir Shah (Driver)

LIST OF AUTHORS

Tauseef Ahmed, Senior Fellow, National Institute of Population Studies, Islamabad

Syed Mubashir Ali, Deputy Principal Investigator, PDHS, National Institute of Population Studies, Islamabad

Alfredo Aliaga, Senior Statistical Expert, Institute for Resource Development, Macro International, Columbia, MD, USA

Fred Arnold, Senior Population Specialist, Institute for Resource Development, Macro International, Columbia, MD, and Research Associate, East-West Population Institute, Honolulu, Hawaii, USA

Mohammad Ayub, Assistant Chief, Nutrition Section, Planning and Development Division, Government of Pakistan, Islamabad

Mansoor-ul-Hassan Bhatti, Fellow, National Institute of Population Studies, Islamabad

George Bicego, Demographic Analyst, Institute for Resource Development, Macro International, Columbia, MD, USA

K. Zaki Hasan, Principal, Baqai Medical College, Karachi

Sultan S. Hashmi, Resident Advisor, National Institute of Population Studies, Islamabad

M.D. Mallick, Deputy Director General, Federal Bureau of Statistics, Karachi

Abdul Razzaque Rukanuddin, Director, National Institute of Population Studies, Islamabad

Zeba Sathar, Chief of Research, Pakistan Institute of Development Economics, Islamabad

Nasra M. Shah, Assistant Professor, Department of Community Medicine, Faculty of Medicine, Kuwait University, Safat, Kuwait

Mehboob Sultan, Fellow, National Institute of Population Studies, Islamabad

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

APPENDIX B

ESTIMATES OF SAMPLING ERRORS

Estimates derived from a sample survey are affected by two types of errors: nonsampling error and sampling error. Nonsampling error is the result of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the PDHS to minimize these types of errors, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of women selected in the PDHS is only one of many samples that could have been selected from the same population, using the same design and expected sample size. Each one would have yielded results that differ somewhat from the actual sample selected. The sampling error is a measure of the variability between all possible samples. Although it is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic as measured in 95 percent of all possible samples of identical size and design will fall within a range of plus or minus two times the standard error of that statistic.

If the sample of women had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the PDHS sample design was a two-stage stratified design, and, consequently, it was necessary to use more complex formulas. The computer package CLUSTERS, developed by the International Statistical Institute for the World Fertility Survey, was used to compute the sampling errors with the proper statistical methodology.

The CLUSTERS program treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$var(r) = \frac{1-f}{x^2} \sum_{h=1}^{H} \left[\frac{m_h}{m_h-1} \left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - r.x_{hi} \text{ , and } z_h = y_h - r.x_h$$

where
- h represents the stratum which varies from 1 to H,
- m_h is the total number of enumeration areas (EAs) selected in the h^{th} stratum,
- y_{hi} is the sum of the values of variable y in EA i in the h^{th} stratum,
- x_{hi} is the sum of the number of cases (women) in EA i in the h^{th} stratum, and
- f is the overall sampling fraction, which is so small that CLUSTERS ignores it.

In addition to the standard errors, CLUSTERS computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. CLUSTERS also computes the relative error and confidence limits for the estimates.

Sampling errors for the PDHS are calculated by group of eligible women and by group of husbands for selected variables considered to be of primary interest. The results are presented in this appendix for the whole country, for major cities, other urban and rural areas, for the four provinces (Punjab, Sindh, NWFP, and Balochistan), and (for women only) for three major age groups. For each variable, the type of statistic (mean or proportion) and the base population are given in Table B.1. Tables B.2 through B.13 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE) for each variable.

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of sub-populations such as geographical areas. For example, for the variable *living children*, the relative standard error as a percent of the estimated mean for the whole country, for major cities and for Balochistan is 1.2 percent, 2.0 percent, and 4.5 percent, respectively.

The confidence interval has the following interpretation. For the contraceptive prevalence rate (the percentage of women currently using a method), the overall average from the national sample is .118 (that is, 11.8 percent) and its standard error is .005. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e. .118±.010, which means that there is a high probability (95 percent) that the *true* prevalence rate is between .108 and .129 (that is, 10.8-12.9 percent).

Table B.1 List of selected variables for sampling errors, Pakistan DHS, 1990-91

	WOMEN'S VARIABLE	ESTIMATE	BASE POPULATION
URBAN	Urban	Proportion	Ever-married women
NOEDUC	With no education	Proportion	Ever-married women
SECOND	With secondary education or higher	Proportion	Ever-married women
COUSIN	Married to first cousin	Proportion	Ever-married women
CUWORK	Currently working	Proportion	Ever-married women
SURVIV	Living children	Mean	Currently married women
KMETHO	Knowing any contraceptive method	Proportion	Currently married women
KSOURC	Knowing source for any method	Proportion	Currently married women
EVUSE	Ever used any contraceptive method	Proportion	Currently married women
CUSING	Currently using any method	Proportion	Currently married women
CUMOD	Currently using a modern method	Proportion	Currently married women
CUIUD	Currently using IUD	Proportion	Currently married women
CUCOND	Currently using condom	Proportion	Currently married women
CUSTER	Currently using female sterilisation	Proportion	Currently married women
PSOURC	Using public sector source	Proportion	Current users of modern methods
NOMORE	Wanting no more children	Proportion	Currently married women
DELAY	Wanting to delay at least 2 years	Proportion	Currently married women
IDEAL	Ideal number of children	Mean	Ever-married women with numerical response
ANTCAR	Mothers receiving antenatal care	Proportion	Births in last 5 years
NTETAN	Mothers no received tetanus injection	Proportion	Births in last 5 years
MEDELI	Received medical care at birth	Proportion	Births in last 5 years
RESPIR	Had acute respiratory illness in last 2 weeks	Proportion	Children under 5
FEVER	Had fever in last two weeks	Proportion	Children under 5
DIARR1	Had diarrhoea in last 24 hours	Proportion	Children under 5
DIARR2	Had diarrhoea in 2 last weeks	Proportion	Children under 5
ORSTRE	Treated with ORS packets	Proportion	Children under 5 with diarrhoea in last 2 weeks
MEDTRE	Consulted a medical facility	Proportion	Children under 5 with diarrhoea in last 2 weeks
HCARD	Showing health card	Proportion	Children 12-23 months
BCG12	Received BCG vaccination	Proportion	Children 12-23 months
DPT12	Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
POL12	Received polio vaccination (3 doses)	Proportion	Children 12-23 months
MEAS12	Received measles vaccination (3 doses)	Proportion	Children 12-23 months
FULVAC	Fully vaccinated	Proportion	Children 12-23 months

	HUSBANDS' VARIABLE	ESTIMATE	BASE POPULATION
HNOEDU	With no education	Proportion	All husbands
HSEC	With secondary education or higher	Proportion	All husbands
HKMETH	Knowing any contraceptive method	Proportion	All husbands
HKSOUR	Knowing source for any method	Proportion	All husbands
HEVUSE	Ever used any contraceptive method	Proportion	All husbands
HCUSIN	Currently using any method	Proportion	All husbands
HCUMOD	Currently using any modern method	Proportion	All husbands
HCUIUD	Currently using IUD	Proportion	All husbands
HCUCON	Currently using condom	Proportion	All husbands
HCUSTE	Currently using male sterilisation	Proportion	All husbands
HNOMOR	Wanting no more children	Proportion	All husbands
HDELAY	Wanting to delay at least 2 years	Proportion	All husbands

Table B.2 Sampling errors: Entire sample, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Relative standard error (SER)	Standard deviation (SD)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN										
URBAN	.305	.007	6611.0	6611.0	.006	.461	1.205	.022	.292	.319
NOEDUC	.792	.009	6611.0	6611.0	.005	.406	1.872	.012	.773	.811
SECOND	.073	.006	6611.0	6611.0	.003	.261	1.856	.081	.061	.085
COUSIN	.503	.011	6611.0	6611.0	.006	.500	1.750	.021	.482	.525
CUWORK	.168	.007	6611.0	6611.0	.005	.374	1.605	.044	.153	.183
SURVIV	3.523	.043	6611.0	6611.0	.031	2.556	1.365	.012	3.437	3.609
KMETHO	.779	.009	6393.0	6364.1	.005	.415	1.793	.012	.760	.797
KSOURC	.463	.011	6393.0	6364.1	.006	.499	1.738	.023	.442	.485
EVUSE	.207	.007	6393.0	6364.1	.005	.405	1.449	.035	.192	.222
CUSING	.118	.005	6393.0	6364.1	.004	.323	1.345	.046	.108	.129
CUMOD	.090	.005	6393.0	6364.1	.004	.286	1.295	.051	.081	.099
CUIUD	.013	.002	6393.0	6364.1	.001	.111	1.633	.181	.008	.017
CUCOND	.027	.003	6393.0	6364.1	.002	.162	1.238	.093	.022	.032
CUSTER	.035	.003	6393.0	6364.1	.002	.185	1.392	.091	.029	.042
PSOURC	.557	.028	655.0	573.7	.019	.497	1.422	.050	.501	.612
NOMORE	.364	.009	6393.0	6364.1	.006	.481	1.436	.024	.346	.381
DELAY	.176	.008	6393.0	6364.1	.005	.381	1.579	.043	.161	.191
IDEAL	4.060	.050	2625.0	2587.3	.034	1.723	1.483	.012	3.961	4.160
ANTCAR	.292	.009	6352.0	6406.6	.007	.579	1.294	.032	.273	.311
NTETAN	.700	.011	6352.0	6406.6	.007	.577	1.450	.035	.279	.321
MEDELI	.188	.010	6352.0	6406.6	.006	.497	1.537	.051	.168	.207
RESPIR	.160	.009	5828.0	5775.6	.005	.411	1.657	.056	.142	.178
FEVER	.301	.009	5828.0	5775.6	.007	.514	1.313	.029	.283	.319
DIARR1	.083	.006	5828.0	5775.6	.004	.288	1.644	.075	.071	.095
DIARR2	.145	.008	5828.0	5775.6	.005	.382	1.510	.052	.130	.161
ORSTRE	.388	.027	781.0	840.3	.018	.498	1.497	.069	.335	.441
MEDTRE	.483	.020	781.0	840.3	.018	.511	1.117	.042	.442	.523
HCARD	.296	.020	1187.0	1214.7	.013	.454	1.482	.066	.257	.335
BCG12	.697	.020	1187.0	1214.7	.013	.456	1.503	.029	.657	.736
DPT12	.427	.020	1187.0	1214.7	.014	.491	1.414	.047	.387	.467
POL12	.429	.020	1187.0	1214.7	.014	.491	1.427	.047	.389	.470
MEAS12	.502	.021	1187.0	1214.7	.014	.496	1.475	.042	.459	.544
FULVAC	.351	.018	1187.0	1214.7	.014	.474	1.287	.050	.315	.386
HUSBANDS										
HNOEDU	.502	.019	1354.0	1354.0	.014	.500	1.366	.037	.465	.540
HSEC	.204	.015	1354.0	1354.0	.011	.403	1.403	.075	.173	.235
HKMETH	.793	.020	1354.0	1354.0	.011	.405	1.795	.025	.754	.833
HKSOUR	.651	.022	1354.0	1354.0	.013	.477	1.705	.034	.607	.695
HEVUSE	.247	.017	1354.0	1354.0	.012	.432	1.411	.067	.214	.280
HCUSIN	.151	.014	1354.0	1354.0	.010	.358	1.396	.090	.124	.178
HCUMOD	.101	.010	1354.0	1354.0	.008	.301	1.276	.104	.080	.121
HCUIUD	.014	.004	1354.0	1354.0	.003	.118	1.179	.267	.007	.022
HCUCON	.036	.006	1354.0	1354.0	.005	.185	1.166	.165	.024	.047
HCUSTE	.038	.007	1354.0	1354.0	.005	.192	1.409	.192	.024	.053
HNOMOR	.290	.017	1354.0	1354.0	.012	.454	1.342	.057	.257	.323
HDELAY	.198	.016	1354.0	1354.0	.011	.399	1.435	.079	.167	.229

Table B.3 Sampling errors: Urban areas, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	1.000	.000	3384.0	2019.1	.000	.000	1.000	1.000
NOEDUC	.550	.018	3384.0	2019.1	2.135	.033	.513	.586
SECOND	.211	.018	3384.0	2019.1	2.577	.086	.175	.247
COUSIN	.410	.011	3384.0	2019.1	1.330	.027	.387	.432
CUWORK	.130	.009	3384.0	2019.1	1.606	.071	.112	.149
SURVIV	3.716	.062	3384.0	2019.1	1.421	.017	3.592	3.840
KMETHO	.913	.007	3256.0	1929.8	1.349	.007	.900	.927
KSOURC	.722	.011	3256.0	1929.8	1.442	.016	.700	.745
EVUSE	.417	.013	3256.0	1929.8	1.461	.030	.392	.442
CUSING	.257	.012	3256.0	1929.8	1.515	.045	.234	.281
CUMOD	.187	.009	3256.0	1929.8	1.343	.049	.168	.205
CUIUD	.020	.003	3256.0	1929.8	1.177	.145	.014	.026
CUCOND	.067	.006	3256.0	1929.8	1.376	.090	.055	.079
CUSTER	.073	.008	3256.0	1929.8	1.720	.108	.057	.089
PSOURC	.497	.031	512.0	360.5	1.397	.062	.435	.558
NOMORE	.449	.012	3256.0	1929.8	1.425	.028	.424	.474
DELAY	.163	.009	3256.0	1929.8	1.350	.054	.146	.181
IDEAL	3.725	.047	1679.0	1188.8	1.385	.012	3.632	3.818
ANTCAR	.596	.017	3306.0	1980.2	1.584	.029	.561	.631
NTETAN	.469	.017	3306.0	1980.2	1.528	.032	.497	.565
MEDELI	.423	.020	3306.0	1980.2	1.888	.048	.382	.464
RESPIR	.138	.009	3062.0	1835.2	1.331	.067	.120	.157
FEVER	.309	.014	3062.0	1835.2	1.519	.046	.280	.337
DIARR1	.077	.010	3062.0	1835.2	1.859	.126	.058	.097
DIARR2	.150	.012	3062.0	1835.2	1.740	.083	.125	.175
ORSTRE	.469	.038	415.0	275.6	1.504	.080	.394	.544
MEDTRE	.627	.031	415.0	275.6	1.277	.050	.565	.689
HCARD	.347	.020	615.0	383.1	1.031	.057	.308	.386
BCG12	.842	.025	615.0	383.1	1.765	.030	.791	.893
DPT12	.554	.026	615.0	383.1	1.342	.048	.501	.607
POL12	.554	.026	615.0	383.1	1.342	.048	.501	.607
MEAS12	.646	.031	615.0	383.1	1.618	.048	.584	.707
FULVAC	.456	.029	615.0	383.1	1.440	.062	.399	.513
HUSBANDS								
HNOEDU	.314	.023	696.0	432.2	1.298	.073	.269	.360
HSEC	.410	.031	696.0	432.2	1.687	.077	.347	.473
HKMETH	.882	.019	696.0	432.2	1.524	.021	.844	.919
HKSOUR	.820	.022	696.0	432.2	1.529	.027	.776	.865
HEVUSE	.455	.028	696.0	432.2	1.463	.061	.399	.510
HCUSIN	.269	.025	696.0	432.2	1.465	.092	.220	.318
HCUMOD	.189	.023	696.0	432.2	1.568	.123	.142	.235
HCUIUD	.032	.009	696.0	432.2	1.396	.290	.014	.051
HCUCON	.070	.013	696.0	432.2	1.334	.184	.045	.096
HCUSTE	.061	.014	696.0	432.2	1.501	.224	.034	.088
HNOMOR	.375	.027	696.0	432.2	1.443	.071	.322	.428
HDELAY	.171	.021	696.0	432.2	1.483	.124	.129	.214

Table B.4 Sampling errors: Major cities, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	1.000	.000	1820.0	1151.1	.000	.000	1.000	1.000
NOEDUC	.477	.025	1820.0	1151.1	2.175	.053	.426	.528
SECOND	.259	.024	1820.0	1151.1	2.326	.092	.212	.307
COUSIN	.376	.016	1820.0	1151.1	1.371	.041	.344	.407
CUWORK	.129	.014	1820.0	1151.1	1.798	.110	.101	.157
SURVIV	3.686	.072	1820.0	1151.1	1.200	.020	3.542	3.829
KMETHO	.945	.008	1744.0	1098.1	1.448	.008	.929	.961
KSOURC	.786	.012	1744.0	1098.1	1.253	.016	.761	.811
EVUSE	.492	.017	1744.0	1098.1	1.409	.034	.458	.526
CUSING	.310	.017	1744.0	1098.1	1.506	.054	.277	.343
CUMOD	.223	.012	1744.0	1098.1	1.165	.052	.200	.246
CUIUD	.024	.005	1744.0	1098.1	1.248	.191	.015	.033
CUCOND	.089	.010	1744.0	1098.1	1.412	.108	.070	.108
CUSTER	.085	.012	1744.0	1098.1	1.778	.140	.061	.108
PSOURC	.487	.038	347.0	244.6	1.432	.079	.410	.564
NOMORE	.457	.016	1744.0	1098.1	1.373	.036	.424	.490
DELAY	.168	.013	1744.0	1098.1	1.417	.075	.143	.194
IDEAL	3.586	.051	1100.0	799.1	1.380	.014	3.485	3.688
ANTCAR	.702	.020	1808.0	1139.9	1.391	.028	.663	.742
NTETAN	.424	.019	1808.0	1139.9	1.292	.034	.537	.615
MEDELI	.511	.028	1808.0	1139.9	1.852	.054	.456	.567
RESPIR	.123	.013	1671.0	1054.5	1.368	.103	.098	.148
FEVER	.312	.020	1671.0	1054.5	1.558	.064	.272	.352
DIARR1	.075	.011	1671.0	1054.5	1.622	.149	.053	.098
DIARR2	.151	.015	1671.0	1054.5	1.578	.101	.120	.181
ORSTRE	.538	.043	238.0	158.7	1.221	.080	.452	.625
MEDTRE	.656	.043	238.0	158.7	1.320	.066	.570	.742
HCARD	.345	.025	335.0	215.0	.966	.073	.294	.395
BCG12	.835	.034	335.0	215.0	1.683	.041	.767	.903
DPT12	.529	.031	335.0	215.0	1.142	.059	.467	.591
POL12	.529	.031	335.0	215.0	1.142	.059	.467	.591
MEAS12	.644	.035	335.0	215.0	1.357	.055	.573	.715
FULVAC	.437	.032	335.0	215.0	1.184	.073	.374	.501
HUSBANDS								
HNOEDU	.327	.030	380.0	249.7	1.247	.092	.267	.388
HSEC	.426	.040	380.0	249.7	1.591	.095	.346	.507
HKMETH	.892	.024	380.0	249.7	1.486	.027	.845	.939
HKSOUR	.843	.028	380.0	249.7	1.523	.034	.786	.900
HEVUSE	.503	.034	380.0	249.7	1.329	.068	.435	.571
HCUSIN	.281	.032	380.0	249.7	1.408	.116	.216	.346
HCUMOD	.205	.028	380.0	249.7	1.349	.136	.149	.261
HCUIUD	.041	.014	380.0	249.7	1.332	.332	.014	.068
HCUCON	.090	.019	380.0	249.7	1.288	.211	.052	.128
HCUSTE	.056	.013	380.0	249.7	1.130	.237	.030	.083
HNOMOR	.355	.035	380.0	249.7	1.422	.098	.285	.425
HDELAY	.189	.031	380.0	249.7	1.561	.166	.126	.252

Table B.5 Sampling errors: Other urban areas, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	1.000	.000	1564.0	867.9	.000	.000	1.000	1.000
NOEDUC	.646	.027	1564.0	867.9	2.192	.041	.593	.699
SECOND	.147	.028	1564.0	867.9	3.133	.191	.091	.203
COUSIN	.455	.016	1564.0	867.9	1.276	.035	.423	.487
CUWORK	.132	.011	1564.0	867.9	1.327	.086	.109	.155
SURVIV	3.757	.110	1564.0	867.9	1.728	.029	3.536	3.978
KMETHO	.872	.012	1512.0	831.7	1.352	.013	.849	.895
KSOURC	.638	.021	1512.0	831.7	1.681	.033	.597	.680
EVUSE	.318	.019	1512.0	831.7	1.583	.060	.280	.356
CUSING	.188	.016	1512.0	831.7	1.603	.086	.156	.220
CUMOD	.139	.015	1512.0	831.7	1.707	.109	.109	.170
CUIUD	.014	.004	1512.0	831.7	1.178	.250	.007	.022
CUCOND	.038	.006	1512.0	831.7	1.191	.154	.026	.050
CUSTER	.057	.010	1512.0	831.7	1.598	.167	.038	.077
PSOURC	.517	.052	165.0	115.9	1.335	.101	.413	.621
NOMORE	.438	.019	1512.0	831.7	1.497	.044	.400	.476
DELAY	.157	.012	1512.0	831.7	1.296	.077	.133	.181
IDEAL	4.010	.088	579.0	389.7	1.306	.022	3.835	4.186
ANTCAR	.452	.031	1498.0	840.4	1.903	.067	.391	.513
NTETAN	.530	.030	1498.0	840.4	1.869	.064	.410	.531
MEDELI	.303	.028	1498.0	840.4	1.950	.094	.246	.360
RESPIR	.159	.013	1391.0	780.7	1.238	.084	.133	.186
FEVER	.304	.020	1391.0	780.7	1.467	.066	.264	.344
DIARR1	.080	.017	1391.0	780.7	2.164	.216	.046	.115
DIARR2	.150	.021	1391.0	780.7	1.953	.138	.108	.191
ORSTRE	.375	.062	177.0	116.8	1.853	.165	.251	.499
MEDTRE	.588	.045	177.0	116.8	1.236	.077	.497	.678
HCARD	.350	.032	280.0	168.1	1.158	.092	.285	.414
BCG12	.852	.038	280.0	168.1	1.868	.045	.775	.928
DPT12	.587	.046	280.0	168.1	1.631	.079	.494	.680
POL12	.587	.046	280.0	168.1	1.631	.079	.494	.680
MEAS12	.648	.053	280.0	168.1	1.914	.081	.543	.754
FULVAC	.480	.051	280.0	168.1	1.746	.106	.379	.582
HUSBANDS								
HNOEDU	.296	.036	316.0	182.6	1.380	.120	.225	.367
HSEC	.387	.050	316.0	182.6	1.816	.129	.287	.487
HKMETH	.868	.031	316.0	182.6	1.614	.036	.806	.929
HKSOUR	.789	.035	316.0	182.6	1.537	.045	.718	.859
HEVUSE	.389	.045	316.0	182.6	1.638	.116	.299	.479
HCUSIN	.253	.037	316.0	182.6	1.512	.146	.179	.327
HCUMOD	.166	.039	316.0	182.6	1.848	.233	.089	.244
HCUIUD	.020	.012	316.0	182.6	1.534	.598	-.004	.045
HCUCON	.044	.015	316.0	182.6	1.315	.345	.014	.075
HCUSTE	.067	.026	316.0	182.6	1.881	.396	.014	.120
HNOMOR	.402	.042	316.0	182.6	1.503	.103	.319	.485
HDELAY	.147	.026	316.0	182.6	1.311	.178	.095	.200

Table B.6 Sampling errors: Rural areas, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	.000	.000	3227.0	4591.9	.000	.000	.000	.000
NOEDUC	.899	.010	3227.0	4591.9	1.882	.011	.879	.919
SECOND	.013	.003	3227.0	4591.9	1.492	.231	.007	.019
COUSIN	.544	.015	3227.0	4591.9	1.662	.027	.515	.573
CUWORK	.185	.010	3227.0	4591.9	1.447	.054	.165	.204
SURVIV	3.438	.055	3227.0	4591.9	1.216	.016	3.329	3.548
KMETHO	.720	.013	3137.0	4434.3	1.620	.018	.694	.746
KSOURC	.351	.015	3137.0	4434.3	1.707	.041	.322	.380
EVUSE	.116	.008	3137.0	4434.3	1.482	.073	.099	.133
CUSING	.058	.006	3137.0	4434.3	1.349	.097	.047	.069
CUMOD	.048	.005	3137.0	4434.3	1.375	.109	.038	.059
CUIUD	.009	.003	3137.0	4434.3	1.763	.323	.003	.015
CUCOND	.010	.002	3137.0	4434.3	1.390	.252	.005	.014
CUSTER	.019	.003	3137.0	4434.3	1.269	.163	.013	.025
PSOURC	.658	.052	143.0	213.2	1.319	.080	.553	.763
NOMORE	.327	.011	3137.0	4434.3	1.312	.034	.305	.349
DELAY	.181	.010	3137.0	4434.3	1.464	.056	.161	.201
IDEAL	4.345	.087	946.0	1398.5	1.384	.020	4.172	4.518
ANTCAR	.156	.011	3046.0	4426.4	1.397	.070	.134	.178
NTETAN	.803	.013	3046.0	4426.4	1.507	.068	.170	.224
MEDELI	.082	.010	3046.0	4426.4	1.650	.125	.062	.103
RESPIR	.170	.012	2766.0	3940.3	1.548	.072	.146	.195
FEVER	.297	.011	2766.0	3940.3	1.152	.038	.275	.320
DIARR1	.085	.008	2766.0	3940.3	1.454	.092	.070	.101
DIARR2	.143	.009	2766.0	3940.3	1.332	.066	.124	.162
ORSTRE	.348	.035	366.0	564.8	1.412	.102	.277	.419
MEDTRE	.412	.026	366.0	564.8	1.019	.063	.360	.464
HCARD	.273	.027	572.0	831.6	1.488	.101	.218	.328
BCG12	.629	.027	572.0	831.6	1.360	.043	.575	.684
DPT12	.369	.026	572.0	831.6	1.312	.071	.316	.421
POL12	.372	.027	572.0	831.6	1.325	.071	.319	.425
MEAS12	.436	.028	572.0	831.6	1.354	.064	.380	.491
FULVAC	.302	.022	572.0	831.6	1.161	.073	.258	.346
HUSBANDS								
HNOEDU	.591	.025	658.0	921.8	1.327	.043	.540	.641
HSEC	.108	.015	658.0	921.8	1.201	.135	.079	.137
HKMETH	.752	.028	658.0	921.8	1.644	.037	.696	.807
HKSOUR	.571	.031	658.0	921.8	1.612	.054	.509	.634
HEVUSE	.150	.018	658.0	921.8	1.320	.123	.113	.187
HCUSIN	.096	.015	658.0	921.8	1.322	.159	.065	.126
HCUMOD	.059	.010	658.0	921.8	1.093	.170	.039	.079
HCUIUD	.006	.003	658.0	921.8	1.143	.586	-.001	.012
HCUCON	.019	.006	658.0	921.8	1.106	.308	.007	.031
HCUSTE	.028	.009	658.0	921.8	1.354	.313	.010	.045
HNOMOR	.250	.021	658.0	921.8	1.250	.084	.208	.293
HDELAY	.211	.021	658.0	921.8	1.291	.097	.170	.252

Table B.7 *Sampling errors: Punjab, Pakistan 1990-91*

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	.284	.009	2207.0	3948.1	.896	.030	.267	.301
NOEDUC	.765	.014	2207.0	3948.1	1.573	.019	.737	.793
SECOND	.080	.009	2207.0	3948.1	1.519	.110	.062	.098
COUSIN	.530	.016	2207.0	3948.1	1.481	.030	.498	.561
CUWORK	.158	.010	2207.0	3948.1	1.348	.066	.137	.179
SURVIV	3.409	.062	2207.0	3948.1	1.161	.018	3.286	3.533
KMETHO	.806	.013	2110.0	3767.9	1.486	.016	.780	.831
KSOURC	.478	.015	2110.0	3767.9	1.347	.031	.448	.507
EVUSE	.229	.011	2110.0	3767.9	1.148	.046	.208	.250
CUSING	.130	.008	2110.0	3767.9	1.026	.058	.115	.145
CUMOD	.098	.007	2110.0	3767.9	1.058	.070	.085	.112
CUIUD	.015	.004	2110.0	3767.9	1.370	.243	.008	.022
CUCOND	.030	.004	2110.0	3767.9	1.014	.126	.022	.038
CUSTER	.038	.005	2110.0	3767.9	1.170	.127	.029	.048
PSOURC	.561	.040	263.0	370.1	1.293	.071	.482	.641
NOMORE	.405	.012	2110.0	3767.9	1.158	.031	.380	.429
DELAY	.204	.011	2110.0	3767.9	1.305	.056	.181	.227
IDEAL	3.982	.059	1087.0	1670.5	1.292	.015	3.863	4.101
ANTCAR	.239	.013	2193.0	3932.6	1.115	.054	.213	.264
NTETAN	.698	.014	2193.0	3932.6	1.164	.048	.273	.331
MEDELI	.164	.013	2193.0	3932.6	1.302	.080	.138	.190
RESPIR	.170	.013	1983.0	3515.6	1.398	.078	.143	.196
FEVER	.308	.012	1983.0	3515.6	1.048	.040	.283	.332
DIARR1	.080	.009	1983.0	3515.6	1.403	.112	.063	.098
DIARR2	.144	.011	1983.0	3515.6	1.261	.076	.122	.165
ORSTRE	.357	.039	284.0	504.8	1.320	.110	.279	.436
MEDTRE	.439	.028	284.0	504.8	.905	.064	.382	.495
HCARD	.312	.028	427.0	762.6	1.230	.089	.256	.367
BCG12	.758	.026	427.0	762.6	1.271	.035	.705	.811
DPT12	.467	.029	427.0	762.6	1.189	.062	.409	.524
POL12	.469	.029	427.0	762.6	1.201	.062	.411	.527
MEAS12	.544	.031	427.0	762.6	1.291	.057	.482	.606
FULVAC	.386	.025	427.0	762.6	1.069	.066	.336	.437
HUSBANDS								
HNOEDU	.484	.028	461.0	801.4	1.182	.057	.429	.539
HSEC	.213	.024	461.0	801.4	1.232	.110	.166	.260
HKMETH	.806	.029	461.0	801.4	1.581	.036	.747	.864
HKSOUR	.660	.034	461.0	801.4	1.525	.051	.593	.728
HEVUSE	.278	.025	461.0	801.4	1.220	.092	.227	.329
HCUSIN	.182	.021	461.0	801.4	1.178	.117	.139	.224
HCUMOD	.115	.016	461.0	801.4	1.078	.140	.082	.147
HCUIUD	.020	.006	461.0	801.4	.949	.309	.008	.032
HCUCON	.036	.009	461.0	801.4	.992	.239	.019	.053
HCUSTE	.045	.012	461.0	801.4	1.196	.258	.022	.068
HNOMOR	.340	.024	461.0	801.4	1.090	.071	.292	.388
HDELAY	.215	.023	461.0	801.4	1.200	.107	.169	.261

Table B.8 Sampling errors: Sindh, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	.469	.018	1798.0	1529.1	1.518	.038	.434	.505
NOEDUC	.768	.016	1798.0	1529.1	1.568	.020	.737	.799
SECOND	.092	.012	1798.0	1529.1	1.759	.131	.068	.116
COUSIN	.497	.019	1798.0	1529.1	1.604	.038	.459	.534
CUWORK	.249	.014	1798.0	1529.1	1.332	.055	.222	.276
SURVIV	3.764	.073	1798.0	1529.1	1.158	.019	3.618	3.909
KMETHO	.744	.015	1741.0	1486.0	1.476	.021	.713	.775
KSOURC	.472	.022	1741.0	1486.0	1.841	.047	.428	.517
EVUSE	.218	.015	1741.0	1486.0	1.496	.068	.189	.248
CUSING	.124	.012	1741.0	1486.0	1.506	.096	.101	.148
CUMOD	.091	.008	1741.0	1486.0	1.162	.088	.075	.107
CUIUD	.009	.002	1741.0	1486.0	1.083	.269	.004	.014
CUCOND	.034	.005	1741.0	1486.0	1.095	.139	.025	.044
CUSTER	.035	.004	1741.0	1486.0	.848	.107	.027	.042
PSOURC	.494	.037	189.0	134.5	1.004	.074	.421	.568
NOMORE	.323	.016	1741.0	1486.0	1.386	.048	.292	.354
DELAY	.145	.011	1741.0	1486.0	1.342	.078	.122	.168
IDEAL	3.986	.122	753.0	590.1	1.658	.031	3.742	4.231
ANTCAR	.500	.017	1650.0	1363.7	1.035	.033	.467	.533
NTETAN	.594	.022	1650.0	1363.7	1.400	.054	.363	.450
MEDELI	.322	.023	1650.0	1363.7	1.533	.071	.276	.368
RESPIR	.172	.016	1508.0	1222.4	1.446	.094	.140	.204
FEVER	.342	.019	1508.0	1222.4	1.384	.055	.304	.379
DIARR1	.106	.012	1508.0	1222.4	1.374	.111	.082	.129
DIARR2	.196	.015	1508.0	1222.4	1.305	.074	.167	.225
ORSTRE	.484	.037	284.0	239.1	1.128	.076	.410	.558
MEDTRE	.597	.033	284.0	239.1	1.055	.055	.532	.662
HCARD	.257	.022	298.0	244.5	.849	.086	.212	.301
BCG12	.602	.033	298.0	244.5	1.151	.055	.535	.668
DPT12	.330	.028	298.0	244.5	1.007	.085	.274	.386
POL12	.330	.028	298.0	244.5	1.007	.085	.274	.386
MEAS12	.412	.029	298.0	244.5	.985	.070	.355	.469
FULVAC	.253	.025	298.0	244.5	.986	.100	.202	.303
HUSBANDS								
HNOEDU	.479	.028	364.0	349.7	1.054	.058	.424	.534
HSEC	.204	.022	364.0	349.7	1.055	.109	.159	.248
HKMETH	.772	.033	364.0	349.7	1.491	.042	.707	.838
HKSOUR	.672	.030	364.0	349.7	1.198	.044	.613	.732
HEVUSE	.241	.026	364.0	349.7	1.140	.106	.190	.292
HCUSIN	.125	.020	364.0	349.7	1.180	.164	.084	.166
HCUMOD	.091	.016	364.0	349.7	1.070	.178	.059	.123
HCUIUD	.004	.003	364.0	349.7	.820	.712	-.002	.009
HCUCON	.040	.010	364.0	349.7	1.006	.258	.019	.061
HCUSTE	.035	.010	364.0	349.7	1.033	.286	.015	.055
HNOMOR	.252	.027	364.0	349.7	1.199	.108	.198	.307
HDELAY	.159	.025	364.0	349.7	1.300	.157	.109	.208

Table B.9 Sampling errors: NWFP, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	.160	.008	1665.0	878.3	.855	.048	.145	.175
NOEDUC	.906	.011	1665.0	878.3	1.609	.013	.883	.929
SECOND	.029	.005	1665.0	878.3	1.139	.160	.020	.039
COUSIN	.383	.020	1665.0	878.3	1.656	.052	.343	.422
CUWORK	.039	.006	1665.0	878.3	1.334	.162	.026	.052
SURVIV	3.640	.082	1665.0	878.3	1.268	.023	3.475	3.804
KMETHO	.836	.020	1620.0	856.4	2.202	.024	.796	.877
KSOURC	.451	.026	1620.0	856.4	2.083	.057	.400	.503
EVUSE	.141	.012	1620.0	856.4	1.413	.087	.116	.165
CUSING	.086	.009	1620.0	856.4	1.342	.109	.067	.104
CUMOD	.076	.008	1620.0	856.4	1.280	.111	.059	.092
CUIUD	.011	.003	1620.0	856.4	1.254	.301	.004	.017
CUCOND	.008	.002	1620.0	856.4	.966	.260	.004	.013
CUSTER	.032	.008	1620.0	856.4	1.848	.252	.016	.048
PSOURC	.649	.047	165.0	64.8	1.258	.072	.555	.742
NOMORE	.335	.019	1620.0	856.4	1.599	.056	.297	.372
DELAY	.131	.007	1620.0	856.4	.838	.054	.117	.145
IDEAL	4.336	.117	579.0	284.9	1.564	.027	4.101	4.571
ANTCAR	.186	.018	1609.0	864.5	1.545	.098	.149	.222
NTETAN	.819	.021	1609.0	864.5	1.754	.114	.140	.222
MEDELI	.116	.011	1609.0	864.5	1.178	.097	.093	.138
RESPIR	.122	.011	1505.0	815.3	1.141	.086	.101	.143
FEVER	.249	.014	1505.0	815.3	1.131	.057	.221	.277
DIARR1	.070	.009	1505.0	815.3	1.463	.135	.051	.089
DIARR2	.096	.009	1505.0	815.3	1.165	.091	.078	.113
ORSTRE	.312	.042	139.0	78.0	1.086	.135	.228	.396
MEDTRE	.415	.045	139.0	78.0	1.090	.108	.326	.505
HCARD	.313	.052	301.0	164.9	1.973	.166	.209	.418
BCG12	.638	.039	301.0	164.9	1.432	.062	.559	.717
DPT12	.440	.046	301.0	164.9	1.622	.105	.348	.531
POL12	.445	.047	301.0	164.9	1.658	.106	.351	.539
MEAS12	.482	.033	301.0	164.9	1.157	.069	.416	.548
FULVAC	.376	.039	301.0	164.9	1.405	.103	.299	.454
HUSBANDS								
HNOEDU	.549	.033	313.0	151.3	1.176	.060	.483	.615
HSEC	.188	.027	313.0	151.3	1.236	.145	.134	.243
HKMETH	.778	.029	313.0	151.3	1.219	.037	.720	.835
HKSOUR	.528	.044	313.0	151.3	1.569	.084	.440	.617
HEVUSE	.165	.024	313.0	151.3	1.127	.143	.118	.213
HCUSIN	.093	.017	313.0	151.3	1.028	.182	.059	.127
HCUMOD	.078	.016	313.0	151.3	1.062	.206	.046	.111
HCUIUD	.010	.006	313.0	151.3	1.070	.612	-.002	.022
HCUCON	.035	.011	313.0	151.3	1.029	.306	.013	.056
HCUSTE	.024	.010	313.0	151.3	1.136	.408	.004	.044
HNOMOR	.194	.026	313.0	151.3	1.164	.134	.142	.246
HDELAY	.256	.031	313.0	151.3	1.266	.122	.193	.319

Table B.10 Sampling errors: Balochistan, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
URBAN	.158	.020	941.0	255.4	1.676	.126	.118	.198
NOEDUC	.963	.008	941.0	255.4	1.363	.009	.946	.980
SECOND	.012	.002	941.0	255.4	.677	.198	.007	.017
COUSIN	.544	.043	941.0	255.4	2.674	.080	.457	.631
CUWORK	.289	.043	941.0	255.4	2.914	.149	.203	.375
SURVIV	3.443	.155	941.0	255.4	1.950	.045	3.133	3.754
KMETHO	.385	.056	922.0	253.8	3.493	.146	.273	.497
KSOURC	.239	.043	922.0	253.8	3.030	.178	.154	.324
EVUSE	.043	.008	922.0	253.8	1.202	.188	.027	.059
CUSING	.020	.006	922.0	253.8	1.301	.301	.008	.032
CUMOD	.017	.006	922.0	253.8	1.351	.340	.005	.028
CUIUD	.005	.003	922.0	253.8	1.227	.601	-.001	.010
CUCOND	.002	.000	922.0	253.8	.000	.000	.002	.002
CUSTER	.003	.002	922.0	253.8	.872	.507	-.000	.006
PSOURC	.721	.117	38.0	4.3	1.580	.162	.488	.954
NOMORE	.089	.018	922.0	253.8	1.895	.200	.053	.125
DELAY	.087	.021	922.0	253.8	2.252	.241	.045	.128
IDEAL	6.332	.316	206.0	41.9	1.919	.050	5.700	6.963
ANTCAR	.360	.046	900.0	245.8	2.165	.126	.269	.451
NTETAN	.893	.026	900.0	245.8	2.077	.238	.056	.158
MEDELI	.075	.018	900.0	245.8	1.606	.236	.040	.111
RESPIR	.083	.017	832.0	222.3	1.692	.203	.049	.116
FEVER	.161	.018	832.0	222.3	1.321	.110	.126	.196
DIARR1	.045	.015	832.0	222.3	2.120	.337	.015	.076
DIARR2	.083	.024	832.0	222.3	2.244	.293	.034	.131
ORSTRE	.302	.069	74.0	18.4	1.176	.229	.164	.441
MEDTRE	.483	.093	74.0	18.4	1.370	.192	.297	.668
HCARD	.186	.049	161.0	42.7	1.576	.263	.088	.284
BCG12	.371	.113	161.0	42.7	2.942	.305	.144	.598
DPT12	.229	.082	161.0	42.7	2.451	.359	.064	.393
POL12	.234	.081	161.0	42.7	2.404	.347	.072	.396
MEAS12	.341	.068	161.0	42.7	1.786	.198	.206	.476
FULVAC	.178	.065	161.0	42.7	2.119	.363	.049	.308
HUSBANDS								
HNOEDU	.813	.051	216.0	51.6	1.922	.063	.711	.915
HSEC	.107	.032	216.0	51.6	1.514	.298	.043	.171
HKMETH	.783	.074	216.0	51.6	2.636	.095	.635	.931
HKSOUR	.717	.063	216.0	51.6	2.067	.088	.590	.844
HEVUSE	.057	.026	216.0	51.6	1.651	.458	.005	.109
HCUSIN	.021	.010	216.0	51.6	1.005	.470	.001	.040
HCUMOD	.013	.008	216.0	51.6	1.023	.598	-.003	.029
HCUIUD	.008	.008	216.0	51.6	1.271	.972	-.007	.023
HCUCON	.001	.001	216.0	51.6	.502	1.014	-.001	.003
HCUSTE	.004	.003	216.0	51.6	.651	.735	-.002	.009
HNOMOR	.056	.021	216.0	51.6	1.333	.373	.014	.098
HDELAY	.033	.018	216.0	51.6	1.505	.558	-.004	.069

Table B.11 Sampling errors: Age group 15-24, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
			WOMEN					
URBAN	.260	.014	1471.0	1487.3	1.215	.053	.232	.288
NOEDUC	.770	.017	1471.0	1487.3	1.515	.022	.736	.803
SECOND	.062	.009	1471.0	1487.3	1.353	.137	.045	.079
COUSIN	.560	.020	1471.0	1487.3	1.518	.035	.521	.600
CUWORK	.143	.014	1471.0	1487.3	1.544	.099	.115	.171
SURVIV	1.158	.038	1471.0	1487.3	1.282	.033	1.081	1.234
KMETHO	.725	.017	1447.0	1459.0	1.418	.023	.692	.759
KSOURC	.383	.019	1447.0	1459.0	1.491	.050	.345	.422
EVUSE	.101	.010	1447.0	1459.0	1.219	.096	.082	.120
CUSING	.052	.006	1447.0	1459.0	1.096	.123	.039	.065
CUMOD	.033	.006	1447.0	1459.0	1.213	.173	.021	.044
CUIUD	.006	.003	1447.0	1459.0	1.393	.467	.000	.012
CUCOND	.013	.003	1447.0	1459.0	1.158	.264	.006	.020
CUSTER	.003	.002	1447.0	1459.0	1.082	.486	.000	.007
PSOURC	.382	.084	59.0	47.9	1.309	.219	.214	.549
NOMORE	.093	.011	1447.0	1459.0	1.474	.121	.070	.115
DELAY	.358	.018	1447.0	1459.0	1.406	.050	.322	.393
IDEAL	3.839	.072	634.0	631.8	1.322	.019	3.696	3.982
ANTCAR	.321	.021	1518.0	1496.0	1.344	.064	.280	.362
NTETAN	.664	.020	1518.0	1496.0	1.307	.059	.297	.376
MEDELI	.206	.016	1518.0	1496.0	1.234	.079	.173	.238
RESPIR	.167	.018	1376.0	1341.4	1.516	.107	.132	.203
FEVER	.317	.018	1376.0	1341.4	1.278	.058	.280	.354
DIARR1	.119	.014	1376.0	1341.4	1.488	.115	.092	.147
DIARR2	.198	.016	1376.0	1341.4	1.335	.080	.166	.229
ORSTRE	.340	.048	236.0	265.2	1.501	.140	.245	.435
MEDTRE	.449	.048	236.0	265.2	1.459	.107	.353	.544
HCARD	.254	.030	323.0	304.8	1.179	.117	.195	.314
BCG12	.695	.033	323.0	304.8	1.259	.048	.629	.762
DPT12	.343	.034	323.0	304.8	1.241	.099	.275	.412
POL12	.344	.034	323.0	304.8	1.241	.099	.276	.412
MEAS12	.479	.041	323.0	304.8	1.426	.086	.396	.561
FULVAC	.274	.033	323.0	304.8	1.291	.121	.208	.340

Table B.12 Sampling errors: Age group 25-34, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
			WOMEN					
URBAN	.310	.011	2669.0	2681.7	1.231	.036	.288	.332
NOEDUC	.766	.013	2669.0	2681.7	1.526	.016	.741	.791
SECOND	.096	.010	2669.0	2681.7	1.816	.108	.075	.116
COUSIN	.499	.017	2669.0	2681.7	1.758	.034	.465	.533
CUWORK	.165	.010	2669.0	2681.7	1.379	.060	.145	.185
SURVIV	3.211	.055	2669.0	2681.7	1.443	.017	3.102	3.321
KMETHO	.793	.013	2606.0	2598.9	1.680	.017	.767	.820
KSOURC	.471	.014	2606.0	2598.9	1.480	.031	.442	.500
EVUSE	.212	.010	2606.0	2598.9	1.310	.049	.191	.233
CUSING	.113	.008	2606.0	2598.9	1.348	.074	.096	.130
CUMOD	.083	.006	2606.0	2598.9	1.184	.077	.071	.096
CUIUD	.018	.004	2606.0	2598.9	1.591	.229	.010	.027
CUCOND	.036	.005	2606.0	2598.9	1.277	.130	.026	.045
CUSTER	.017	.003	2606.0	2598.9	1.078	.162	.011	.022
PSOURC	.448	.048	269.0	216.7	1.586	.108	.351	.544
NOMORE	.314	.013	2606.0	2598.9	1.474	.043	.287	.340
DELAY	.197	.011	2606.0	2598.9	1.455	.058	.174	.219
IDEAL	4.039	.069	1132.0	1131.3	1.318	.017	3.902	4.177
ANTCAR	.309	.013	3402.0	3457.1	1.263	.042	.283	.335
NTETAN	.688	.015	3402.0	3457.1	1.435	.047	.282	.341
MEDELI	.205	.013	3402.0	3457.1	1.409	.062	.180	.231
RESPIR	.155	.009	3113.0	3107.6	1.293	.060	.136	.173
FEVER	.285	.011	3113.0	3107.6	1.263	.040	.262	.308
DIARR1	.071	.007	3113.0	3107.6	1.517	.103	.057	.086
DIARR2	.126	.010	3113.0	3107.6	1.565	.081	.106	.147
ORSTRE	.421	.032	379.0	392.9	1.207	.075	.358	.484
MEDTRE	.522	.030	379.0	392.9	1.121	.058	.462	.582
HCARD	.339	.029	620.0	647.5	1.526	.084	.282	.397
BCG12	.706	.026	620.0	647.5	1.450	.037	.654	.758
DPT12	.447	.027	620.0	647.5	1.374	.060	.393	.501
POL12	.451	.027	620.0	647.5	1.387	.061	.396	.506
MEAS12	.527	.025	620.0	647.5	1.264	.047	.477	.577
FULVAC	.374	.026	620.0	647.5	1.335	.068	.323	.425

Table B.13 Sampling errors: Age group 35-49, Pakistan 1990-91

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
			WOMEN					
URBAN	.328	.010	2471.0	2442.1	1.108	.032	.307	.349
NOEDUC	.835	.012	2471.0	2442.1	1.610	.014	.810	.859
SECOND	.056	.007	2471.0	2442.1	1.481	.122	.042	.070
COUSIN	.472	.014	2471.0	2442.1	1.398	.030	.444	.501
CUWORK	.187	.011	2471.0	2442.1	1.340	.056	.166	.208
SURVIV	5.306	.064	2471.0	2442.1	1.305	.012	5.178	5.434
KMETHO	.796	.012	2340.0	2306.1	1.383	.014	.773	.819
KSOURC	.505	.016	2340.0	2306.1	1.507	.031	.474	.536
EVUSE	.268	.013	2340.0	2306.1	1.406	.048	.242	.294
CUSING	.167	.010	2340.0	2306.1	1.260	.058	.147	.186
CUMOD	.134	.009	2340.0	2306.1	1.276	.067	.116	.152
CUIUD	.010	.003	2340.0	2306.1	1.414	.286	.004	.016
CUCOND	.026	.005	2340.0	2306.1	1.450	.183	.017	.036
CUSTER	.077	.007	2340.0	2306.1	1.336	.096	.062	.091
PSOURC	.660	.039	327.0	309.1	1.475	.059	.583	.738
NOMORE	.592	.013	2340.0	2306.1	1.327	.023	.565	.619
DELAY	.037	.005	2340.0	2306.1	1.273	.134	.027	.047
IDEAL	4.259	.076	859.0	824.3	1.178	.018	4.106	4.411
ANTCAR	.222	.017	1432.0	1453.5	1.252	.075	.188	.255
NTETAN	.764	.018	1432.0	1453.5	1.318	.075	.201	.271
MEDELI	.126	.012	1432.0	1453.5	1.122	.093	.103	.150
RESPIR	.165	.016	1339.0	1326.5	1.457	.097	.133	.198
FEVER	.322	.019	1339.0	1326.5	1.339	.057	.285	.359
DIARR1	.073	.010	1339.0	1326.5	1.328	.135	.053	.093
DIARR2	.137	.014	1339.0	1326.5	1.497	.105	.108	.166
ORSTRE	.386	.050	166.0	182.2	1.359	.130	.286	.487
MEDTRE	.447	.048	166.0	182.2	1.262	.108	.351	.544
HCARD	.239	.034	244.0	262.4	1.287	.141	.172	.306
BCG12	.675	.038	244.0	262.4	1.322	.056	.599	.751
DPT12	.475	.040	244.0	262.4	1.288	.083	.395	.554
POL12	.475	.040	244.0	262.4	1.288	.083	.395	.554
MEAS12	.466	.039	244.0	262.4	1.282	.084	.388	.545
FULVAC	.383	.038	244.0	262.4	1.270	.099	.307	.459

APPENDIX C

DATA QUALITY TABLES

APPENDIX C

DATA QUALITY TABLES

Table C.1 Age distribution of household population

Single-year age distribution of the de facto household population by sex (weighted), Pakistan 1990-91

Age	Males		Females	
	Number	Percent	Number	Percent
<1	714	3.0	642	2.9
1	598	2.5	558	2.5
2	643	2.7	598	2.7
3	589	2.5	639	2.9
4	587	2.5	546	2.5
5	845	3.6	806	3.7
6	930	3.9	805	3.7
7	807	3.4	835	3.8
8	946	4.0	810	3.7
9	575	2.4	584	2.7
10	888	3.7	787	3.6
11	462	1.9	446	2.0
12	834	3.5	714	3.3
13	527	2.2	483	2.2
14	563	2.4	569	2.6
15	565	2.4	476	2.2
16	540	2.3	498	2.3
17	398	1.7	309	1.4
18	630	2.7	675	3.1
19	315	1.3	261	1.2
20	601	2.5	675	3.1
21	252	1.1	204	0.9
22	478	2.0	430	2.0
23	261	1.1	260	1.2
24	290	1.2	230	1.0
25	660	2.8	728	3.3
26	297	1.3	312	1.4
27	204	0.9	217	1.0
28	298	1.3	314	1.4
29	101	0.4	98	0.4
30	729	3.1	626	2.9
31	74	0.3	107	0.5
32	245	1.0	222	1.0
33	107	0.5	139	0.6
34	114	0.5	113	0.5
35	660	2.8	547	2.5
36	150	0.6	131	0.6
37	76	0.3	100	0.5
38	133	0.6	132	0.6
39	64	0.3	86	0.4
40	599	2.5	409	1.9

Table C.1 Household age distribution (continued)

Single-year age distribution of the de facto household population by sex (weighted), Pakistan 1990-91

Age	Males		Females	
	Number	Percent	Number	Percent
41	68	0.3	96	0.4
42	133	0.6	159	0.7
43	90	0.4	110	0.5
44	62	0.3	97	0.4
45	456	1.9	313	1.4
46	92	0.4	95	0.4
47	78	0.3	75	0.3
48	96	0.4	90	0.4
49	44	0.2	29	0.1
50	398	1.7	308	1.4
51	64	0.3	133	0.6
52	118	0.5	189	0.9
53	56	0.2	109	0.5
54	42	0.2	66	0.3
55	280	1.2	374	1.7
56	89	0.4	83	0.4
57	33	0.1	49	0.2
58	61	0.3	67	0.3
59	43	0.2	24	0.1
60	523	2.2	405	1.8
61	47	0.2	38	0.2
62	68	0.3	33	0.1
63	40	0.2	34	0.2
64	30	0.1	20	0.1
65	308	1.3	233	1.1
66	33	0.1	17	0.1
67	34	0.1	31	0.1
68	35	0.1	31	0.1
69	16	0.1	20	0.1
70+	971	4.1	506	2.3
Don't know, missing	14	0.1	10	--
Total	23773	100.0	21965	100.0

Note: The de facto population includes all usual residents and nonresidents who slept in the household the night before interview.
-- Less than 0.05 percent

Table C.2 Age distribution of eligible and interviewed women

Percent distribution in five-year age groups of the de facto household population of all women and ever-married women aged 10-54 and of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), Pakistan 1990-91

Age group	All women	Ever-married women	Interviewed women		Percentage interviewed
			Number	Percent	
10-14	2998	NA	NA	NA	NA
15-19	2219	420	414	6.6	98.7
20-24	1798	1086	1015	16.2	93.5
25-29	1669	1466	1419	22.6	96.8
30-34	1207	1162	1123	17.9	96.7
35-39	996	976	925	14.7	94.8
40-44	871	850	797	12.7	93.8
45-49	602	590	582	9.3	98.7
50-54	805	799	NA	NA	NA
15-49	9363	6549	6277	100.0	95.8

Note: The de facto population includes all usual residents and non-residents who slept in the household the night before the interview. Weights for both households and interviewed women are household weights.
NA = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Pakistan 1990-91

Subject	Reference group	Percentage missing information	Number of cases
Birth date			
Month only	Last 15 years	8.0	20527
Month and year		0.2	20527
Age at death	Last 15 years	0.6	2494
Age/date at first union[1]	Ever-married women	0.6	6611
Respondent's education	Ever-married women	--	6611
Child's size at birth	Births in last 0-59 months	1.5	6490
Anthropometry[2]	Living children age 1-59 months		
Height		19.6	5776
Weight		20.5	5776
Diarrhoea in last 2 weeks	Living children age 1-59 months	--	5776

-- Less than 0.05 percent
[1]Both year and age missing
[2]Child not measured

Table C.4 Births by calendar year

Distribution of births by calendar year for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year (weighted), Pakistan 1990-91

	Number of births			Percent with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
Year	L	D	T	L	D	T	L	D	T	L	D	T
1991	212	17	228	100.0	100.0	100.0	148.1	58.6	138.3	NA	NA	NA
1990	1427	78	1505	98.0	92.4	97.7	109.4	67.9	106.8	NA	NA	NA
1989	1072	128	1199	97.6	91.5	96.9	90.8	159.7	96.4	82.2	111.0	84.5
1988	1180	151	1332	97.3	92.4	96.8	123.4	118.6	122.8	107.8	109.5	108.0
1987	1118	149	1267	95.6	83.3	94.1	97.0	163.7	103.1	106.1	113.8	106.9
1986	927	111	1038	93.7	94.3	93.8	96.5	100.9	96.9	64.8	54.1	63.4
1985	1745	260	2005	93.0	81.7	91.5	102.1	105.9	102.6	141.8	152.2	143.0
1984	1535	231	1766	91.2	85.2	90.4	105.7	122.5	107.8	95.1	104.2	96.2
1983	1482	183	1665	91.0	84.3	90.3	93.2	124.0	96.2	98.9	86.1	97.3
1982	1461	195	1657	90.9	84.3	90.2	102.1	93.7	101.1	116.4	97.1	113.7
1987-91	5009	523	5532	97.3	89.8	96.6	106.6	125.4	108.3	NA	NA	NA
1982-86	7150	980	8130	91.9	84.9	91.0	100.2	109.6	101.3	NA	NA	NA
1977-81	5131	836	5967	90.3	86.1	89.7	109.7	83.2	105.5	NA	NA	NA
1972-76	3425	631	4056	89.0	81.0	87.7	109.7	99.1	107.9	NA	NA	NA
Before 1972	2577	608	3185	85.8	77.7	84.2	108.0	116.2	109.6	NA	NA	NA
All	23292	3578	26870	91.6	84.0	90.6	105.9	104.0	105.6	NA	NA	NA

NA = Not applicable

[1]Both year and month of birth given

[2]$(B_m/B_f)x100$, where B_m and B_f are the numbers of male and female births, respectively

[3]$[2B_x/B_{x-1}+B_{x+1})]x100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Pakistan 1990-91

Age at death (days)	Years preceding survey				
	0-4	5-9	10-14	15-19	0-19
<1	47	73	65	28	213
1	68	75	60	27	230
2	17	36	18	8	79
3	25	49	35	8	117
4	8	22	14	11	54
5	17	30	8	11	65
6	14	24	22	12	72
7	20	21	29	21	91
8	13	42	13	19	87
9	3	8	10	3	24
10	16	18	18	6	59
11	8	4	6	4	21
12	1	11	9	9	29
13	3	5	0	3	11
14	3	2	3	7	15
15	15	15	11	3	44
16	9	10	1	6	26
17	1	6	2	1	10
18	3	2	4	1	10
19	0	1	1	2	4
20	6	11	6	3	26
21	0	1	0	6	8
22	3	1	2	0	5
23	0	1	0	0	1
24	1	1	0	0	2
25	4	1	1	2	8
26	0	1	3	0	4
27	2	0	0	0	2
28	0	0	0	0	0
29	0	0	2	0	2
30	2	6	3	3	15
Missing	3	0	0	0	3
Percent early neonatal[1]	63.3	64.7	63.8	51.3	62.1
Total 0-30	309	476	349	203	1337

[1]0-6 days/0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods of birth preceding the survey (weighted), Pakistan 1990-91

Age at death (months)	Years preceding survey				
	0-4	5-9	10-14	15-19	0-19
<1[a]	312	476	349	203	1340
1	48	57	44	40	189
2	34	78	32	17	160
3	35	33	28	16	113
4	14	36	23	7	79
5	9	27	17	7	60
6	25	37	23	15	100
7	4	24	15	12	56
8	14	14	12	5	45
9	20	5	15	14	55
10	16	14	12	11	53
11	3	10	6	7	25
12	11	13	2	6	32
13	1	1	0	0	2
14	1	2	1	0	5
15	0	11	2	3	17
16	5	0	0	3	8
17	0	2	1	0	3
18	5	19	12	6	42
19	0	0	0	0	0
20	0	0	0	0	0
21	0	1	0	1	2
22	1	0	0	0	1
23	0	0	0	0	0
Missing	0	1	1	1	4
1 year	43	60	46	43	193
Percent neonatal[b]	67.3	65.7	68.2	68.7	67.2
Total 0-23 months	534	812	575	354	2275

[a]Includes deaths under 1 month reported in days
[b]Under 1 month/under 1 year

APPENDIX D

QUESTIONNAIRES

PAKISTAN DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD SCHEDULE - URDU-ENGLISH

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

PROVINCE .....

URBAN/RURAL (urban=1, rural=2) .....

MAJOR CITY/DIVISION/DISTRICT .....

CLUSTER NUMBER .....

HOUSEHOLD NUMBER .....

MAJOR CITY/SMALL CITY,TOWN/VILLAGE .....
(major city=1/small city,town=2/village=3)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				NAME
RESULT*				RESULT
NEXT VISIT: DATE / TIME				TOTAL NUMBER OF VISITS

*RESULT CODES:
1 COMPLETED
2 HOUSEHOLD PRESENT BUT NO COMPETENT RESP. AT HOME
3 HOUSEHOLD ABSENT
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE HUSBANDS

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME				
DATE				

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you now.

اب ہیں آپ سے آپکے گھرانے کے افراد کے بارے میں کچھ معلومات حاصل کرنا چاہوں گی/گا جو عموماً آپ کے گھر میں رہتے یا اب ٹھہرے ہوئے ہیں۔

LINE NO. (1)	USUAL RESIDENTS AND VISITORS (2)	RELATIONSHIP TO HEAD OF HOUSEHOLD (3)	RESIDENCE (4)		SEX (5)	AGE (6)	MARITAL STATUS (7)	EDUCATION (8)			NATURAL PARENTS**** (9)		ELIGIBILITY (10)
								Has (NAME) ever been to school?	What is the highest level of school (NAME) attended? What is the highest class (NAME) completed at that level?***	FOR ALL AGED LESS THAN 25 YRS. Is (NAME) still in school? (11)	FOR EVERYONE AGED LESS THAN 15 YEARS		CIRCLE LINE NUMBER OF ELIGIBLE WOMEN AND PUT SQUARE AROUND LINE NUMBER OF ELIGIBLE HUSBANDS
	Please give me the names of the persons who usually live in your household or are staying with you now, starting with the head of the household. براہ مہربانی مجھے اپنے گھرانے کے افراد کے نام بتائیں جو عموماً آپکے گھر میں رہتے ہیں۔ یا اب آپ کے ساتھ مقیم ہیں۔ پہلے گھرانے کے سربراہ کا نام بتائیے۔	What is the relationship of (NAME) to the head of the household? (NAME) کا گھر کے سربراہ سے کیا رشتہ ہے؟	Did (NAME) usually live here? (NAME) عموماً یہاں رہتا/رہتی ہے؟	Did (NAME) sleep here last night? (NAME) کل رات یہاں ٹھہرا تھا/ٹھہری تھی؟	Is (NAME) male or female? کیا (NAME) مرد ہے یا عورت؟	How old is (NAME) in completed years? (NAME) کی عمر کتنی ہے؟	FOR ALL AGED 15 AND OVER What is (NAME'S) marital status?** (NAME) کی ازدواجی حیثیت کیا ہے؟	کیا (NAME) کبھی سکول میں پڑھا/پڑھی ہے؟	(NAME) نے زیادہ سے زیادہ کس درجہ تک تعلیم پائی ہے؟ (NAME) نے اس درجہ/کلاس تک تعلیم مکمل کی ہے؟	کیا (NAME) اب بھی سکول/کالج میں پڑھتا/پڑھتی ہے؟	Does (NAME)'s natural mother live in this household? IF YES: (NAME) کی حقیقی والدہ اسی گھر میں رہتی ہیں؟ IF YES: نام ہے؟ RECORD MOTHER'S LINE NO. (12)	Does (NAME)'s natural father live in this household? IF YES: (NAME) کے حقیقی والد اسی گھر میں رہتے ہیں؟ IF YES: نام ہے؟ RECORD FATHER'S LINE NO. (13)	
			YES NO	YES NO	M F	IN YEARS		YES NO	LEVEL CLASS	YES NO			
01			1 2	1 2	1 2			1 2		1 2			01
02			1 2	1 2	1 2			1 2		1 2			
03			1 2	1 2	1 2			1 2		1 2			03
04			1 2	1 2	1 2			1 2		1 2			04
05			1 2	1 2	1 2			1 2		1 2			05
06			1 2	1 2	1 2			1 2		1 2			06
07			1 2	1 2	1 2			1 2		1 2			07
08			1 2	1 2	1 2			1 2		1 2			08
09			1 2	1 2	1 2			1 2		1 2			09
10			1 2	1 2	1 2			1 2		1 2			10
11			1 2	1 2	1 2			1 2					
12			1 2	1 2	1 2			1 2		1 2			12

* CODES FOR Q.3

RELATIONSHIP TO HEAD OF HOUSEHOLD:

01= HEAD
03= SON OR DAUGHTER
04= SON OR DAUGHTER-IN-LAW
05= GRANDCHILD
06= PARENT
07= PARENT-IN-LAW
08= BROTHER OR SISTER
10= ADOPTED/FOSTER CHILD
11= NOT RELATED
98= DK

** CODES FOR Q.8

MARITAL STATUS:

1=NEVER MARRIED
2=CURRENTLY MARRIED
4=DIVORCED
5=SEPARATED
8=DK

*** CODES FOR Q.10

LEVEL OF EDUCATION:

1= PRIMARY
2= MIDDLE
3= SECONDARY
4= HIGHER
8= DK

CLASS:

00=LESS THAN 1 YEAR COMPLETED
98=DK

**** RECORD 00 IF NATURAL (BIOLOGICAL) PARENT NOT MEMBER OF HOUSEHOLD.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD*	RESIDENCE		SEX	AGE	MARITAL STATUS	EDUCATION			NATURAL PARENTS****		ELIGIBILITY
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	Is (NAME) male or female?	How old is (NAME)?	FOR ALL AGED 15 AND OVER: What is (NAME)'S marital status?	Has (NAME) ever been to school?	What is the highest level of school (NAME) attended? What is the highest class (NAME) completed at that level?***	FOR ALL AGED LESS THAN 25 YRS. Is (NAME) still in school?	FOR EVERYONE AGED LESS THAN 15 YEARS: Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER	FOR EVERYONE AGED LESS THAN 15 YEARS: Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER	CIRCLE LINE NUMBER OF ELIGIBLE WOMEN / LINE NUMBER OF ELIGIBLE HUSBANDS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			YES NO	YES NO	M F	IN YEARS		YES NO	LEVEL CLASS	YES NO			
13			1 2	1 2	1 2			1 2		1 2			13
14			1 2	1 2	1 2			1 2		1 2			14
15			1 2	1 2	1 2			1 2		1 2			15
16			1 2	1 2	1 2			1 2		1 2			16
17			1 2	1 2	1 2			1 2		1 2			17
18			1 2	1 2	1 2			1 2		1 2			18
19			1 2	1 2	1 2			1 2		1 2			19
20			1 2	1 2	1 2			1 2		1 2			20
21			1 2	1 2	1 2			1 2		1 2			21
22			1 2	1 2	1 2			1 2		1 2			22

TICK HERE IF CONTINUATION SHEET USED ☐ TOTAL NUMBER OF ELIGIBLE WOMEN ☐☐ TOTAL NUMBER OF ELIGIBLE HUSBANDS ☐☐

Just to make sure that I have a complete listing:

اس بات کو یقینی بنانے کیلئے کہ میری فہرست مکمل ہے ذرا بتائیں کہ :

1) Are there any other persons such as small children or infants that we have not listed?

۱) کیا کچھ اور افراد ایسے ہیں مثلاً بچے یا شیرخوار جو ہماری فہرست میں شامل ہونے سے رہ گئے ہیں؟

YES ☐ → ENTER EACH IN TABLE NO ☐

2) In addition, are there any other people who may not be members of your family, such as servants, lodgers or friends who usually live here?

۲) اس کے علاوہ کیا کچھ اور لوگ ہیں جو آپ کے کنبے کے فرد نہ ہوں مثلاً گھریلو ملازمین یا دوست احباب جو عموماً یہاں رہتے ہیں؟

YES ☐ → ENTER EACH IN TABLE NO ☐

3) Do you have any guests or temporary visitors staying here, or anyone else who slept here last night?

۳) کیا آپ کے کوئی مہمان یا عارضی ملاقاتی یہاں ٹھہرے ہوئے ہیں یا کوئی اور جو کل رات یہاں ٹھہرا ہو۔

YES ☐ → ENTER EACH IN TABLE NO ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
H1	What is the source of water your household uses for handwashing and dishwashing? آپ کے گھرانے میں ہاتھ دھونے اور برتن دھونے کے لئے پانی کا کیا ذریعہ ہے ؟	PIPED INTO RESIDENCE.....01 PIPED ONTO PROPERTY.....02 PUBLIC TAP.....03 WELL WITH HANDPUMP/TUBE WELL...04 WELL WITHOUT PUMP .....05 RIVER, KAREZ, SPRING, CANAL, SURFACE WATER.....06 TANKER TRUCK, OTHER VENDOR.....07 RAINWATER.....08 OTHER_____09 (SPECIFY)	→H3
H2	How long does it take to go there, get water, and come back? پانی لینے کیلئے جانے اور واپس آنے میں کتنا وقت لگتا ہے ؟	MINUTES..... ☐☐☐ ON PREMISES.....996	
H3	Does your household get drinking water from this same source? کیا آپ کا گھرانہ پینے کا پانی اسی ذریعے سے حاصل کرتا ہے ؟	YES.....1 NO.....2	→H5
H4	What is the source of drinking water for members of your household? آپ کے گھرانے کے لئے پینے کا پانی کس ذریعہ سے آتا ہے ؟	PIPED INTO RESIDENCE.....01 PIPED ONTO PROPERTY.....02 PUBLIC TAP.....03 WELL WITH HANDPUMP/TUBE WELL...04 WELL WITHOUT PUMP.....05 RIVER, KAREZ, SPRING, CANAL, SURFACE WATER 06 TANKER TRUCK, OTHER VENDOR.....07 RAINWATER.....08 OTHER_____09 (SPECIFY)	
H5	What kind of toilet facility does your household have? آپ کے گھر میں پیشاب و پاخانہ کے لئے کس طرح کی سہولت ہے ؟	FLUSH.....1 BUCKET.....2 PIT.....3 OTHER_____4 (SPECIFY) NO FACILITIES.....5	
H6	Does your household have: کیا آپکے گھر میں یہ چیزیں موجود ہیں :	YES NO	
	Electricity? بجلی A radio? ریڈیو A television? ٹیلی ویژن A fridge? فریج A room cooler? روم کولر A washing machine? واشنگ مشین A water pump? واٹر پمپ	ELECTRICITY.....1 2 RADIO.....1 2 TELEVISION.....1 2 FRIDGE.....1 2 ROOM COOLER.....1 2 WASHING MACHINE.....1 2 WATER PUMP.....1 2	
H7	Does any member of your household own: کیا آپ کے گھرانے کے کسی فرد کے پاس یہ چیزیں ہیں :	YES NO	
	A bicycle? بائیسکل A motorcycle? موٹر سائیکل A car, van or tractor? کار، وین یا ٹریکٹر	BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR, VAN, OR TRACTOR.....1 2	
H8	How many rooms in your household are used for sleeping? آپ کے گھر میں کتنے کمرے سونے کیلئے استعمال ہوتے ہیں ؟	ROOMS..... ☐☐	
H9	MAIN MATERIAL OF OUTER WALLS. (RECORD OBSERVATION.)	BAKED BRICKS/CEMENTED BLOCKS/ CEMENT.....1 UNBAKED BRICKS AND MUD.....2 WOOD/BAMBOO.....3 OTHER_____4 (SPECIFY)	
H10	MAIN MAYERIAL OF ROOF. (RECORD OBSERVATION.)	RCC/RBC.....1 T-IRON/WOOD/BRICK.....2 ASBESTOS/IRON SHEETS.....3 WOOD/BAMBOO.....4 OTHER_____5 (SPECIFY)	

PAKISTAN DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE - URDU-ENGLISH

IDENTIFICATION

PLACE NAME _____

NAME OF HEAD OF HOUSEHOLD _____

PROVINCE.....

URBAN/RURAL (urban=1, rural=2).....

MAJOR CITY/DIVISION/DISTRICT.....

CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

MAJOR CITY/SMALL CITY,TOWN/VILLAGE.....

(major city=1/small city;town=2/village=3)

NAME AND LINE # OF WOMAN _____

NAME & LINE # OF HUSBAND (IF ELIGIBLE) _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				NAME
RESULT*				
NEXT VISIT: DATE / TIME				TOTAL NUMBER OF VISITS

*RESULT CODES:

1 COMPLETED 3 POSTPONED 5 PARTLY COMPLETED
2 NOT AT HOME 4 REFUSED 6 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE.....

LANGUAGE OF INTERVIEW.....
NATIVE LANGUAGE OF RESPONDENT.....
TRANSLATOR USED..LANGUAGE CODES: YES...1 NO...2

01 URDU 03 SINDHI 05 BALUCHI 07 SIRAIKI
02 PUNJABI 04 PUSHTO 06 BROHI 08 OTHER _____ (SPECIFY)

NAME / DATE	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	TO
101	RECORD THE CURRENT TIME.	HOUR..... [ ][ ] MINUTES..... [ ][ ]	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city or in a village? پہلے میں آپ اور آپ کے گھرانے کے بارے میں کچھ سوالات پوچھنا چاہوں گی ۔ بارہ سال کی عمر تک آپ زیادہ تر کہاں رہیں ۔ شہر میں یا گاؤں میں ؟	CITY.....1 VILLAGE.....2	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? آپ (NAME OF CURRENT PLACE OF RESIDENCE) میں کب سے مسلسل رہ رہی ہیں ؟	YEARS..... [ ][ ] ALWAYS.....95 VISITOR.....96 → 105	
104	Just before you moved here, did you live in a city or in a village? یہاں منتقل ہونے سے پہلے آپ شہر میں رہتی تھیں یا گاؤں میں ؟	CITY.....1 VILLAGE.....2	
105	In what month and year were you born? آپ کس سال اور کس مہینے میں پیدا ہوئی تھیں؟	MONTH..... [ ][ ] DK MONTH.....98 YEAR..... [ ][ ] DK YEAR.....98	
106	How old are you in completed years? آپ اپنی عمر کے کتنے سال مکمل کر چکی ہیں ؟ COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS..... [ ][ ]	
107	Are you now married, widowed, divorced, or separated? کیا آپ اس وقت شادی شدہ ہیں ، بیوہ ہیں ، طلاق شدہ ہیں یا آپ کی علیحدگی ہو چکی ہے ؟	MARRIED.....1 HAS MARRIAGE CONTRACT, BUT NEVER LIVED TOGETHER.....2 WIDOWED.....3 DIVORCED.....4 SEPARATED.....5 NEVER MARRIED.....6 → END	
108	Have you been married only once or more than once? کیا آپ کی شادی صرف ایک مرتبہ ہوئی یا ایک سے زیادہ مرتبہ ؟	ONCE.....1 MORE THAN ONCE.....2	
109	CHECK 107 AND 108 : MARRIED ONCE AND NEVER LIVED WITH HUSBAND → END INT. ANY OTHER MARITAL STATUS ↓		
110	Have you ever attended school? کیا آپ نے کبھی سکول میں پڑھا ہے ؟	YES.....1 NO.....2 → 114	

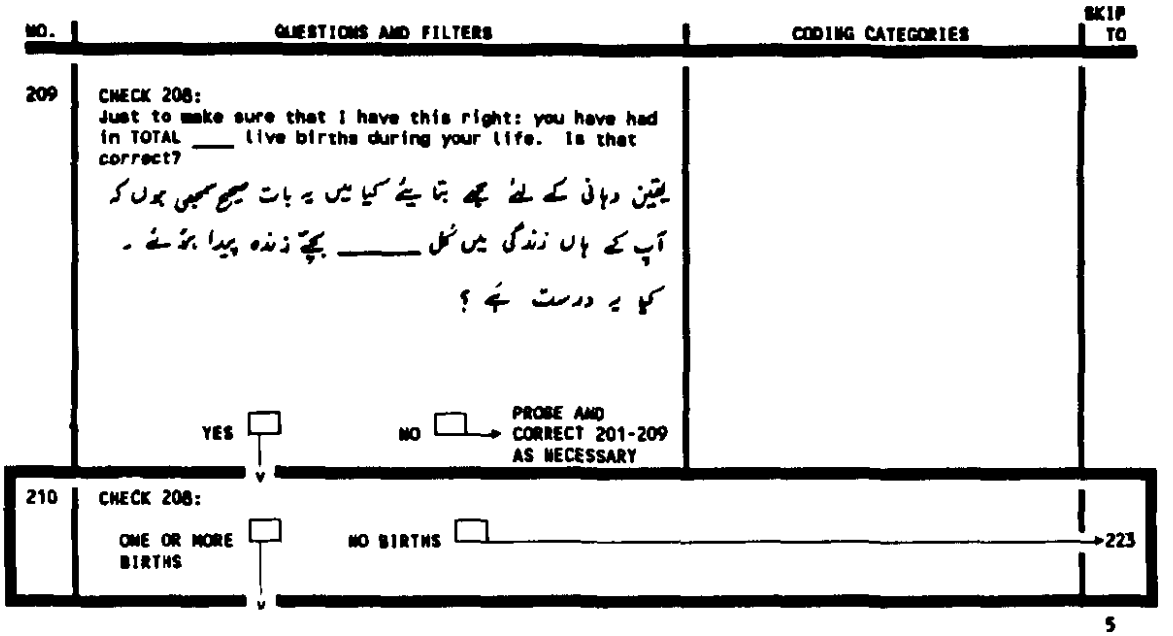
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
111	What is the highest level of school you attended: primary, middle, secondary, or higher? آپ نے کس درجہ تک تعلیم پائی ہے: پرائمری، مڈل، سیکنڈری یا اس سے زیادہ ؟	PRIMARY.....1 MIDDLE.....2 SECONDARY.....3 HIGHER.....4	
112	What is the highest class you completed at that level? آپ نے اُس درجہ پر کس کلاس تک تعلیم مکمل کی ہے ؟	CLASS..... ☐☐	
113	CHECK 111: PRIMARY ☐ MIDDLE OR ABOVE ☐		116
114	Can you read and understand a letter or newspaper easily, with difficulty, or not at all? کیا آپ خط یا اخبار آسانی پڑھ اور سمجھ لیتی ہیں، یا مشکل سے یا بالکل نہیں پڑھ سکتیں ؟	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3	117
115	Can you write a simple letter? کیا آپ ایک سادہ خط لکھ سکتی ہیں ؟	YES.....1 NO.....2	
116	Do you usually read a newspaper or magazine at least once a week? کیا آپ عموماً ہفتے میں کم سے کم ایک مرتبہ اخبار یا رسالہ پڑھتی ہیں ؟	YES.....1 NO.....2	
117	Do you usually listen to a radio at least once a week? کیا آپ عموماً ہفتے میں کم سے کم ایک مرتبہ ریڈیو سنتی ہیں ؟	YES.....1 NO.....2	
118	Do you usually watch television at least once a week? کیا آپ عموماً ہفتے میں کم سے کم ایک مرتبہ ٹیلی وژن دیکھتی ہیں ؟	YES.....1 NO.....2	
119	CHECK HOUSEHOLD QUESTIONNAIRE, COLUMN (4): WOMAN IS A VISITOR (CODED "2" IN COL. 4) ☐ WOMAN IS USUAL RESIDENT (CODED "1" IN COL. 4) ☐		201
120	Now let's talk about the household where you usually live. What is the source of water your household uses for handwashing and dishwashing? اب ہم بات کریں گے اُس گھرانے کی جہاں عموماً آپ رہتی ہیں۔ آپ کے گھرانے میں ہاتھ دھونے اور برتن دھونے کے لئے پانی کس ذریعے سے حاصل ہوتا ہے ؟	PIPED INTO RESIDENCE.....01 PIPED ONTO PROPERTY.....02 PUBLIC TAP.....03 WELL WITH HANDPUMP/TUBE WELL...04 WELL WITHOUT PUMP.....05 RIVER, KAREZ, SPRING, CANAL, SURFACE WATER.....06 TANKER TRUCK, OTHER VENDOR.....07 RAINWATER.....08 OTHER_____09 (SPECIFY)	122
121	How long does it take to go there, get water, and come back? پانی لینے کے لئے جانے اور واپس آنے میں کتنا وقت لگتا ہے ؟	MINUTES..... ☐☐☐ ON PREMISES.....996	
122	Does your household get drinking water from this same source? کیا آپ کا گھرانہ پینے کا پانی اسی ذریعے سے حاصل کرتا ہے ؟	YES.....1 NO.....2	124

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
123	What is the source of drinking water for members of your household? آپ کے گھرانے کے لئے پینے کا پانی کس ذریعے سے آتا ہے ؟	PIPED INTO RESIDENCE.....01 PIPED ONTO PROPERTY.....02 PUBLIC TAP.....03 WELL WITH HANDPUMP/TUBE WELL...04 WELL WITHOUT PUMP.....05 RIVER, KAREZ, SPRING, CANAL, SURFACE WATER 06 TANKER TRUCK, OTHER VENDOR.....07 RAINWATER.....08 OTHER_____09 (SPECIFY)	
124	What kind of toilet facility does your household have? آپ کے گھر میں پیشاب و پاخانہ کے لیئے کس طرح کی سہولت ہے ؟	FLUSH.....1 BUCKET.....2 PIT.....3 OTHER_____4 (SPECIFY) NO FACILITIES.....5	
125	Does your household have: کیا آپ کے گھرانے میں یہ چیزیں موجود ہیں ؟ Electricity? بجلی A radio? ریڈیو A television? ٹیلیویژن A fridge? فریج A room cooler? روم کولر A washing machine? واشنگ مشین A water pump? واٹر پمپ	YES NO ELECTRICITY.....1 2 RADIO.....1 2 TELEVISION.....1 2 FRIDGE.....1 2 ROOM COOLER.....1 2 WASHING MACHINE.....1 2 WATER PUMP.....1 2	
126	Does any member of your household own: کیا آپ کے گھرانے میں کسی فرد کے پاس یہ چیزیں موجود ہیں ؟ A bicycle? سائیکل A motorcycle? موٹر سائیکل A car, van or tractor? کار ، وین یا ٹریکٹر	YES NO BICYCLE.....1 2 MOTORCYCLE.....1 2 CAR, VAN, OR TRACTOR.....1 2	
127	How many rooms in your household are used for sleeping? آپ کے گھر میں کتنے کمرے سونے کے لیئے استعمال ہوتے ہیں ؟	ROOMS..... ☐☐	
128	What material are the outer walls of your house made of? آپ کے گھر کی بیرونی دیواریں کس چیز کی بنی ہوئی ہیں ؟	BAKED BRICKS/CEMENTED BLOCKS/ CEMENT.....1 UNBAKED BRICKS AND MUD.....2 WOOD/BAMBOO.....3 OTHER_____4 (SPECIFY)	
129	What material is the roof of your house made of? آپ کے گھر کی چھت کس چیز کی بنی ہوئی ہے ؟	RCC/RBC.....1 T-IRON/WOOD/BRICK.....2 ASBESTOS/IRON SHEETS.....3 WOOD/BAMBOO.....4 OTHER_____5 (SPECIFY)	
130	What province do you usually live in? آپ عموماً کس صوبے میں رہتی ہیں ؟	PUNJAB.....1 SINDH.....2 NWFP.....3 BALUCHISTAN.....4 ISLAMABAD.....5 OTHER AREAS OF PAKISTAN.....6 OUTSIDE PAKISTAN.....7	
131	Is the place that you usually live a city or a village? آپ عموماً کہاں رہتی ہیں ، کسی شہر میں ، یا گاؤں میں ؟	CITY.....1 VILLAGE.....2	

3

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth? اب میں آپ سے پوچھنا چاہوں گی کہ آپ کے کُل کتنے بچے ہوئے ہیں - کیا آپ نے کبھی جنم دیا ہے ؟	YES.....1 NO.....2	→206
202	Do you have any sons or daughters to whom you have given birth who are now living with you? کیا آپ کے بیٹے یا بیٹیاں ہیں جنہیں آپ نے جنم دیا جو اب آپکے ساتھ رہتے ہیں ؟	YES.....1 NO.....2	→204
203	How many sons live with you? And how many daughters live with you? کتنے بیٹے آپ کے ساتھ رہتے ہیں اور کتنی بیٹیاں آپکے ساتھ رہتی ہیں ؟ IF NONE, RECORD '00'.	SONS AT HOME..... DAUGHTERS AT HOME.....	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? کیا آپ کے کوئی بیٹے اور بیٹیاں ہیں جنہیں آپ نے جنم دیا جو ماشاءاللہ زندہ ہیں مگر آپ کے ساتھ نہیں رہتے ہیں ؟	YES.....1 NO.....2	→206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? کتنے بیٹے حیات ہیں لیکن آپ کے ساتھ نہیں رہتے ؟ اور کتنی بیٹیاں حیات ہیں مگر آپ کے ساتھ نہیں رہتیں ؟ IF NONE, RECORD '00'.	SONS ELSEWHERE..... DAUGHTERS ELSEWHERE.....	
206	Have you ever given birth to a boy or a girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed any sign of life but only survived a few hours or days? کیا آپ نے کبھی ایسے بیٹے یا بیٹی کو جنم دیا جو زندہ پیدا ہوا مگر بعد میں فوت ہو گیا ہو IF NO, PROBE: تو کیا کوئی ایسا بچہ جس نے پیدا ہونے کے بعد آواز نکالی یا زندگی کی کوئی علامت ظاہر کی ہو لیکن صرف چند گھنٹے یا دن زندہ رہا ؟	YES.....1 NO.....2	→208
207	In all, how many boys have died? And how many girls have died? آپ کے کُل کتنے لڑکے فوت ہوئے ہیں ؟ اور کتنی لڑکیاں فوت ہوئی ہیں ؟ IF NONE, RECORD '00'.	BOYS DEAD..... GIRLS DEAD.....	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE RECORD '00'.	TOTAL.....	


NO.
QUESTIONS AND FILTERS
CODING CATEGORIES
SKIP TO
209
CHECK 208:
Just to make sure that I have this right: you have had in TOTAL ____ live births during your life. Is that correct?
یقین دہانی کے لئے مجھے بتایئے کیا میں یہ بات صحیح سمجھی ہوں کہ
آپ کے ہاں زندگی میں کُل _____ بچّے زندہ پیدا ہوئے ۔
کیا یہ درست ہے ؟
YES
NO
PROBE AND CORRECT 201-209 AS NECESSARY
210
CHECK 208:
ONE OR MORE BIRTHS
NO BIRTHS
223
5

211 Now I would like to talk to you about all of your births, whether still alive or not, starting with the first one you had.
اب میں آپ سے یہ معلوم کرنا چاہتی ہوں کہ آپکے ہاں کُل کتنے بچے پیدا ہوئے خواہ وہ اب زندہ ہیں یا نہیں۔ گفتگو کا آغاز آپ کے پہلے بچے سے کرتے ہیں۔
(RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES).

	212 What name was given to your (first, next) baby? آپ کے پہلے اور اس کے بعد والے بچوں کے کیا نام رکھے گئے؟	213 RECORD SINGLE OR MULTIPLE BIRTH STATUS	214 Is (NAME) a boy or a girl? کیا (NAME) لڑکا ہے یا لڑکی؟	215 In what month and year was (NAME) born? (NAME) کس مہینے اور سال میں پیدا ہوا/ہوئی؟ PROBE: What is his/her birthday? OR: In what season was he/she born? اس کا جنم دن کونسا ہے یہ کس موسم میں پیدا ہوا تھا/ہوئی تھی؟	216 Is (NAME) still alive? کیا (NAME) ابھی زندہ ہے؟	217 IF ALIVE: How old is (NAME) in completed years? (NAME) کی عمر کتنے برس ہے؟ RECORD AGE IN COMPLETED YEARS	218 IF ALIVE: Is (NAME) living with you? کیا (NAME) آپ کے ساتھ رہتا ہے/رہتی ہے؟	219 IF LESS THAN 15 YRS. OF AGE: With whom does he/she live? وہ کس کے ساتھ رہتا ہے/رہتی ہے؟ IF AGE 15+: GO TO NEXT BIRTH	220 IF DEAD: How old was he/she when he/she died? وفات کے وقت اسی کی عمر کتنی تھی؟ IF "1 YR.", PROBE: How many months old was (NAME)? (NAME) کی عمر کتنے ماہ تھی؟ RECORD DAYS IF LESS THAN 1 MONTH, MONTHS IF LESS THAN TWO YEARS, OR YEARS.
01	(NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
02	(NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
03	(NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
04	(NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
05	(NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
06	(NAME)	SING.. 1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
07	(NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3

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212 What name was given to your next baby? آپ کے اس کے بعد والے بچوں کے کیا نام رکھے گئے ؟	213 RECORD SINGLE OR MULTIPLE BIRTH STATUS	214 Is (NAME) a boy or a girl? کیا (NAME) لڑکا ہے یا لڑکی ؟	215 In what month and year was (NAME) born? (NAME) کس مہینہ اور سال میں پیدا ہوا ؟ PROBE: What is his/her birthday? OR: In what season was he/she born? اُسکا جنم دن کونسا ہے یہ کس موسم میں پیدا ہوا تھا/ ہوئی تھی ؟	216 Is (NAME) still alive? کیا (NAME) ابھی زندہ ہے ؟	217 IF ALIVE: How old is (NAME) in completed years? (NAME) کی عمر کتنے برس ہے RECORD AGE IN COMPLETED YEARS	218 IF ALIVE: Is (NAME) living with you? کیا (NAME) آپ کے ساتھ رہتا/ رہتی ہے ؟	219 IF LESS THAN 15 YRS. OF AGE: With whom does he/she live? وہ کس کے ساتھ رہتا ہے/ رہتی ہے ؟ IF AGE 15+: GO TO NEXT BIRTH	220 IF DEAD: How old was he/she when he/she died? وفات کے وقت اسکی عمر کتنی تھی ؟ IF "1 YR.", PROBE: How many months old was (NAME)? (NAME) کی عمر کتنے ماہ تھی ؟ RECORD DAYS IF LESS THAN 1 MONTH, MONTHS IF LESS THAN TWO YEARS, OR YEARS.
08 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
09 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
10 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
11 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
12 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3
13 _____ (NAME)	SING...1 MULT...2	BOY...1 GIRL..2	MONTH.. YEAR...	YES...1 NO....2 → 220	AGE IN YEARS	YES.....1 (GO TO NEXT BIRTH) NO.....2	FATHER.....1 (GO NEXT BIRTH) OTHER RELATIVE.2 (GO NEXT BIRTH) SOMEONE ELSE...3 (GO NEXT BIRTH)	DAYS....1 MONTHS..2 YEARS...3

221 COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:

NUMBERS ARE SAME ☐ → NUMBERS ARE DIFFERENT ☐ (PROBE AND RECONCILE)

CHECK: FOR EACH LIVE BIRTH: YEAR OF BIRTH IS RECORDED
FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED
FOR EACH BIRTH INTERVAL >3 YEARS, EXPLANATION IS GIVEN
FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED
FOR AGE AT DEATH 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS ☐

222 CHECK 215 AND ENTER THE NUMBER OF BIRTHS SINCE JANUARY 1986
IF NONE, ENTER 0. ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
223	CHECK 107: CURRENTLY MARRIED (CODE 1 IN 107) ☐ ↓ NOT CURRENTLY MARRIED (CODE 2-5 IN 107) ☐ → 227		
224	Are you pregnant now? کیا آپ اب حاملہ ہیں ؟	YES.....1 NO.....2 → 227 UNSURE.....8 → 227	
225	How many months pregnant are you? آپ کو کتنے مہینے کا حمل ہے ؟	MONTHS..... ☐☐	
226	At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to become pregnant at all? جب آپ حاملہ ہوئیں، کیا اُسوقت آپ حمل چاہتی تھیں یا چاہتی تھیں کہ کچھ وقت کے بعد ہوتا یا آپ کو حمل کی کوئی خواہش نہیں تھی ؟	THEN.....1 LATER.....2 NOT AT ALL.....3	
227	When did your last menstrual period start? آپ کو گزشتہ ماہواری کب شروع ہوئی ؟	DAYS AGO.....1 ☐☐ WEEKS AGO.....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO.....4 ☐☐ IN MENOPAUSE.....994 BEFORE LAST BIRTH.....995 NEVER MENSTRUATED.....996	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
228	Between the first day of a woman's period and the first day of her next period, are there certain times when she has a greater chance of becoming pregnant than other times? ایک عورت کے ایام ماہواری کے پہلے دن اور پھر اگلی ماہواری کے پہلے دن کے درمیان کیا بعض ایسے اوقات ہوتے ہیں جب دوسرے دنوں کے مقابلے میں اُس کے حاملہ ہونے کا زیادہ امکان ہوتا ہے؟	YES.....1 NO.....2 DK.....8	→301
229	During which times of the month does a woman have the greatest chance of becoming pregnant? مہینے کے کن اوقات میں عورت کے حاملہ ہونے کا سب سے زیادہ امکان ہوتا ہے؟	DURING HER PERIOD.....1 RIGHT AFTER HER PERIOD HAS ENDED.....2 IN THE MIDDLE OF THE CYCLE.....3 JUST BEFORE HER PERIOD BEGINS...4 AT ANY TIME.....5 OTHER _____ (SPECIFY) 6 DK.....8	

9

SECTION 3: CONTRACEPTION

301 Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about?

اب میں خاندانی منصوبہ بندی کے بارے میں بات کرنا چاہوں گی۔ یعنی حمل میں تاخیر کرنے یا اِس سے بچنے کے مختلف طریقے یا ذرائع جنہیں کوئی میاں بیوی استعمال کرسکتے ہیں۔ آپ نے کن طریقوں یا ذرائع کے بارے میں سُنا ہے ؟

CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY.
CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.
THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 302, ASK 303-304 BEFORE PROCEEDING TO THE NEXT METHOD.

	302 Have you ever heard of (METHOD)? کیا آپ نے کبھی (METHOD) کے بارے میں سُنا ہے ؟ READ DESCRIPTION OF EACH METHOD	303 Have you ever used (METHOD)? کیا آپ نے کبھی (METHOD) استعمال کیا ہے ؟	304 Do you know where a person could go to get (METHOD)? کیا آپ جانتی ہیں کہ (METHOD) کہاں سے حاصل کیا جا سکتا ہے ؟
01 PILL Women can take a pill every day. گولی عورتیں روزانہ ایک گولی کھا سکتی ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
02 IUD Women can have a loop or coil placed inside them by a doctor or a nurse. چھلا عورتیں کسی ڈاکٹر یا نرس سے اپنے اندر چھلا یا لوپ یا کوائل رکھوا سکتی ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
03 INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months. انجیکشن : عورتیں کسی ڈاکٹر یا نرس سے انجیکشن لگوا سکتی ہیں جس سے وہ کئی ماہ تک حاملہ نہیں ہو سکتیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
04 DIAPHRAGM, FOAM, JELLY Women can place a sponge, suppository, diaphragm, jelly or cream inside them before intercourse. ڈایافرام، فوم، جیلی : عورتیں مباشرت سے پہلے اپنے اندر اسپنج، بتی ڈایافرام جیلی یا کریم رکھ سکتی ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
05 CONDOM Men can use a rubber sheath during sexual intercourse. کنڈوم : مرد مباشرت کے دوران ربڑ کا خول یعنی کنڈوم استعمال کرتے ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2

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	302 Have you ever heard of (METHOD)? کیا آپ نے کبھی (METHOD) کے بارے میں سُنا ہے ؟ READ DESCRIPTION OF EACH METHOD	303 Have you ever used (METHOD)? کیا آپ نے کبھی (METHOD) استعمال کیا ہے ؟	304 Do you know where a person could go to get (METHOD)? کیا آپ جانتی ہیں کہ (METHOD) کہاں سے حاصل کیا جا سکتا ہے ؟
06 **FEMALE STERILIZATION** Women can have an operation to avoid having any more children. عورت کی نس بندی عورتیں مزید بچوں کی پیدائش سے بچنے کے لئے آپریشن کرا سکتی ہیں ۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	Have you ever had an operation to avoid having any more children? کیا آپ نے کبھی آپریشن کرایا ہے تاکہ مزید بچے پیدا نہ ہو سکیں ؟ YES.....1 NO.....2	YES.....1 NO.....2
07 **MALE STERILIZATION** Men can have an operation to avoid having any more children. مرد کی نس بندی مرد مزید بچوں کی پیدائش سے بچنے کیلئے آپریشن کرا سکتے ہیں ۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
08 **PERIODIC ABSTINENCE** Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant. وقتی پرہیز میاں بیوی اِن دنوں میں مباشرت سے پرہیز کر سکتے ہیں جب عورت کے حاملہ ہونے کا زیادہ امکان ہوتا ہے ۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to use periodic abstinence? کیا آپ جانتی ہیں کہ وقتی پرہیز کے متعلق مشورہ کہاں سے لیا جا سکتا ہے؟ YES.....1 NO.....2
09 **WITHDRAWAL** Men can be careful and pull out before climax. عزل : مرد احتیاط کر سکتے ہیں اور اخراج سے پہلے جدا ہو سکتے ہیں ۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	
10 Have you heard of any other ways or methods that women or men can use to avoid pregnancy? کیا آپ نے کسی اور طریقہ یا ذریعہ کے بارے میں سُنا ہے جسے عورتیں یا مرد استعمال کر کے حمل کو ٹال سکیں ؟ 1 _____ (SPECIFY) 2 _____ (SPECIFY) 3 _____ (SPECIFY)	YES/SPONT.....1 NO.....3	YES.....1 NO.....2 YES.....1 NO.....2 YES.....1 NO.....2	

305	CHECK 303: NOT A SINGLE "YES" (NEVER USED)	AT LEAST ONE "YES" (EVER USED) → SKIP TO 308

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
306	Have you ever used anything or tried in any way to delay or avoid getting pregnant? کیا آپ نے کبھی کوئی چیز استعمال کی یا کوئی طریقہ آزمایا تاکہ حمل میں تاخیر ہو سکے یا بچا جا سکے ؟	YES.....1 NO.....2	→337
307	What have you used or done? آپ نے کیا چیز استعمال کی یا کون سا طریقہ آزمایا ؟ CORRECT 303-305 (AND 302 IF NECESSARY).		
308	Now I would like to ask you about the time when you first did something or used a method to avoid getting pregnant. What method did you use at that time? اب میں آپ سے یہ پوچھنا چاہتی ہوں کہ حمل سے بچنے کے لئے آپ نے خاندانی منصوبہ بندی کا جو طریقہ پہلی مرتبہ اِستعمال کیا وہ طریقہ کیا تھا ؟	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY)	
309	How many living children did you have at that time, if any? اس وقت آپ کے کتنے زندہ بچے تھے ؟	NUMBER OF CHILDREN.....	
310	IF NONE, RECORD '00'. CHECK 303(01): EVER USED PILL?	YES NO	→317
311	At the time you first started using the pill, did you consult a doctor, a nurse or a family planning worker? آپ نے جب پہلی مرتبہ گولیوں کا استعمال شروع کیا تھا، کیا اُس وقت آپ نے کسی ڈاکٹر نرس یا خاندانی منصوبہ بندی کے کارکن سے مشورہ کیا تھا؟	NO.....2 YES.....(SKIP TO 317).....1	
312	When you met with that person, did you already have a preference for a particular method of family planning? جب آپ کی ملاقات اُس شخص سے ہوئی تو کیا آپ پہلے ہی سے خاندانی منصوبہ بندی کے کسی خاص طریقے کو ترجیح دیتی تھیں ؟	YES.....1 NO.....2 (SKIP TO 314)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
313	Which method was that? وہ کون سا طریقہ تھا ؟	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY)	
314	Did the provider talk to you about any methods other than the pill? کیا اُس نے گولیوں کے علاوہ آپ کو کوئی دوسرے طریقے بھی بتائے ؟	YES.....1 NO.....2 (SKIP TO 317)	
315	Which method or methods? کون سا طریقہ یا طریقے ؟ (CIRCLE ALL MENTIONED)	IUD.....1 INJECTIONS.....1 DIAPHRAGM/FOAM/JELLY.....1 CONDOM.....1 FEMALE STERILIZATION.....1 MALE STERILIZATION.....1 PERIODIC ABSTINENCE.....1 WITHDRAWAL.....1 OTHER_____.1 (SPECIFY)	
316	Were you satisfied with the information you got from the provider on the method(s) you discussed or not? اُس نے خاندانی منصوبہ بندی کے طریقوں کے بارے میں آپکو جو معلومات مہیا کیں کیا آپ اُن سے مطمئن ہیں ؟	YES.....1 NO.....2	
317	CHECK 224: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→337
318	CHECK 107: CURRENTLY MARRIED (CODE 1 IN 107) ☐ NOT CURRENTLY MARRIED (CODE 2-5 IN 107) ☐		→343
319	CHECK 303 (06): WOMAN NOT STERILIZED ☐ WOMAN STERILIZED ☐		→322A
320	Are you currently doing something or using any method to delay or avoid getting pregnant? کیا آپ حمل میں تاخیر یا بچاؤ کے لئے اِن دِنوں کوئی چیز یا طریقہ استعمال کر رہی ہیں ؟	YES.....1 NO.....2	→322
321	What is the main reason you are not using a method to delay or avoid getting pregnant? اُس کی بڑی وجہ کیا ہے کہ آپ حمل میں تاخیر یا بچاؤ کے لئے کوئی چیز یا طریقہ استعمال نہیں کر رہی ہیں ؟	WANTS (MORE) CHILDREN.....01 LACK OF KNOWLEDGE.....02 HUSBAND OPPOSED.....03 COST TOO MUCH.....04 WORRY ABOUT SIDE EFFECTS.....05 HEALTH CONCERNS.....06 HARD TO GET METHODS.....07 RELIGION.....08 OPPOSED TO FAMILY PLANNING.....09 FATALISTIC.....10 OTHER PEOPLE OPPOSED.....11 INFREQUENT SEX.....12 DIFFICULT TO GET PREGNANT.....13 MENOPAUSAL/HAD HYSTERECTOMY....14 INCONVENIENT.....15 HUSBAND ABSENT.....17 BREASTFEEDING.....18 OTHER_____19 (SPECIFY) DK.....98	→337

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
322 322A	Which method are you using? آپ کونسا طریقہ استعمال کر رہی ہیں ؟ CIRCLE '06' FOR FEMALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY)	→330 →331 →327 →330 →336
323	At the time you last got pills, did you consult a doctor, a nurse or a family planning worker? آخری مرتبہ جب آپ نے گولیاں حاصل کی تھیں تو کیا آپ نے کسی ڈاکٹر، نرس یا خاندانی منصوبہ بندی کے کارکن سے مشورہ کیا تھا؟	YES.....1 NO.....2	
324	May I see the package of pills you are using now? کیا میں گولیوں کا پتہ دیکھ سکتی ہوں جو آپ آجکل استعمال کر رہی ہیں؟ (RECORD NAME OF BRAND.)	PACKAGE SEEN.....1 BRAND NAME_____ □□ PACKAGE NOT SEEN.....2	→326
325	Do you know the brand name of the pills you are now using? آپ آجکل جو گولیاں استعمال کر رہی ہیں کیا آپ کو اُن کا نام معلوم ہے ؟ (RECORD NAME OF BRAND.)	BRAND NAME_____ □□ DK.....98	
326	How much does one packet of pills cost you? آپ کو گولیوں کا ایک پیکٹ کتنے میں ملتا ہے ؟	RUPEES..... □□.□□ FREE.....9996 DK.....9998	→331
327	May I see the package of condoms you are using now? آپ آجکل جو کنڈوم استعمال کر رہے ہیں کیا میں وہ دیکھ سکتی ہوں؟ (RECORD NAME OF BRAND.)	PACKAGE SEEN.....1 BRAND NAME_____ □□ PACKAGE NOT SEEN.....2	→329
328	Do you know the brand name of the condoms you are now using? آپ آجکل جو کنڈوم استعمال کر رہے ہیں کیا آپ کو اُن کا نام معلوم ہے ؟ (RECORD NAME OF BRAND.)	BRAND NAME_____ □□ DK.....98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
329	How much does one condom cost you? آپ کو ایک کنڈوم کتنے میں ملتا ہے ؟	RUPEES..... ☐☐.☐☐ FREE.....9996 DK.....9998	→331
330	How much did it cost for the (IUD insertion/ sterilization operation/last injection)? (چھلّا (IUD) اندر رکھوانے / نس بندی آپریشن کرانے / آخری انجیکشن لگوانے) پر کیا خرچ آیا ؟	RUPEES..... ☐☐☐☐.☐☐ FREE.....999996 DK.....999998	
331	CHECK 322: SHE/HE STERILIZED ☐ → Where did the sterilization take place? آپ کی نس بندی کہاں ہوئی تھی ؟ USING ANOTHER METHOD ☐ → Where did you obtain (METHOD) the last time? آپ نے خاندانی منصوبہ بندی کا آخری مرتبہ (METHOD) کہاں سے حاصل کیا تھا ؟ (NAME OF HOSPITAL, CLINIC OR CENTER, IF CODE 01-05)	GOVERNMENT HOSPITAL/RHSC.....01 RHC/BHU/GOVERNMENT CLINIC.....02 FAMILY WELFARE CENTER.....03 NGO CENTER.....04 PRIVATE HOSPITAL OR CLINIC.....05 MOBILE CLINIC/EXTENSION TEAM...06 FIELD WORKER.....07 →334 PRIVATE DOCTOR.....08 HAKIM/HOMOEOPATH.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE)....11 TRADITIONAL BIRTH ATTENDANT....12 FRIENDS/RELATIVES.....13 OTHER _____ 14 (SPECIFY) DK.....98 →334	
332	How long does it take to travel from your home to this place? آپ کے گھر سے اس جگہ تک پہنچنے میں کتنا وقت لگتا ہے ؟ IF LESS THAN 60 MINUTES, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES.....1 ☐☐ HOURS.....2 ☐☐ DK.....998	
333	Is it easy or difficult to get there? وہاں پہنچنا آسان ہے یا مشکل ؟	EASY.....1 DIFFICULT.....2	
334	CHECK 322: SHE/HE STERILIZED ☐ ↓ USING ANOTHER METHOD ☐	→336	
335	In what month and year was the sterilization operation performed? نس بندی کا آپریشن کس مہینے اور سال میں ہوا تھا ؟	MONTH..... ☐☐ YEAR..... ☐☐	→347
336	For how many months have you been using (CURRENT METHOD) continuously? آپ کتنے مہینوں سے باقاعدہ (CURRENT METHOD) استعمال کر رہی ہیں ؟ IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS..... ☐☐ 8 YEARS OR LONGER.....96	→347

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
337	Do you intend to use a method to delay or avoid pregnancy at any time in the future? کیا آپ مستقبل میں کسی وقت حمل میں تاخیر یا بچاؤ کے لئے خاندانی منصوبہ بندی کا کوئی طریقہ استعمال کرنے کا ارادہ رکھتی ہیں ؟	YES.....1 NO.....2 DK.....8	→340 →343
338	What is the main reason you do not intend to use a method? کیا خاص وجہ ہے کہ آپ خاندانی منصوبہ بندی کا کوئی طریقہ استعمال نہیں کرنا چاہتیں ؟	WANTS CHILDREN.....01 LACK OF KNOWLEDGE.....02 HUSBAND OPPOSED.....03 COST TOO MUCH.....04 WORRY ABOUT SIDE EFFECTS.....05 HEALTH CONCERNS.....06 HARD TO GET METHODS.....07 RELIGION.....08 OPPOSED TO FAMILY PLANNING.....09 FATALISTIC.....10 OTHER PEOPLE OPPOSED.....11 INFREQUENT SEX.....12 DIFFICULT TO GET PREGNANT.....13 MENOPAUSAL/HAD HYSTERECTOMY.....14 INCONVENIENT.....15 NOT CURRENTLY MARRIED.....16 OTHER_____17 (SPECIFY) DK.....98	→343 →343 →343 →343
339	If the decision were entirely up to you, would you want to use a method to delay or avoid a pregnancy at any time in the future? اگر فیصلہ کرنے کے تمام تر اختیارات آپ کے پاس ہوں تو کیا آپ مستقبل میں کسی وقت حمل میں تاخیر یا بچاؤ کا کوئی طریقہ استعمال کریں گی ؟	YES.....1 NO.....2 DK.....8	→343
340	Do you intend to use a method within the next 12 months? کیا آپ آئندہ بارہ مہینے کے دوران کوئی طریقہ استعمال کرنے کا ارادہ رکھتی ہیں ؟	YES.....1 NO.....2 DK.....8	
341	When you use a method, which method would you prefer to use? جب آپ خاندانی منصوبہ بندی کریں گی تو کون سا طریقہ استعمال کرنے کو ترجیح دیں گی ؟	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY) UNSURE.....98	→343
342	Where can you get (METHOD MENTIONED IN 341)? آپ (METHOD MENTIONED IN 341) کہاں سے حاصل کر سکتی ہیں؟ _____ (NAME OF HOSPITAL, CLINIC OR CENTER, IF CODE 01-05)	GOVERNMENT HOSPITAL/RHSC.....01 RHC/BHU/GOVERNMENT CLINIC.....02 FAMILY WELFARE CENTER.....03 NGO CENTER.....04 PRIVATE HOSPITAL OR CLINIC.....05 MOBILE CLINIC/EXTENSION TEAM...06 FIELD WORKER.....07 PRIVATE DOCTOR.....08 HAKIM/HOMOEOPATH.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE)....11 TRADITIONAL BIRTH ATTENDANT....12 FRIENDS/RELATIVES.....13 OTHER_____14 (SPECIFY) DK.....98	→345 →347 →345 →347

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
343	Do you know of a source where you can obtain a method of family planning? کیا آپ کو معلوم ہے کہ خاندانی منصوبہ بندی کا طریقہ کہاں سے حاصل کر سکتے ہیں ؟	YES.....1 NO.....2	→347
344	What source is that? وہ جگہ کون سی ہے ؟ (NAME OF HOSPITAL, CLINIC OR CENTER, IF CODE 01-05)	GOVERNMENT HOSPITAL/RHSC.....01 RHC/BHU/GOVERNMENT CLINIC.....02 FAMILY WELFARE CENTER.....03 NGO CENTER.....04 PRIVATE HOSPITAL OR CLINIC.....05 MOBILE CLINIC/EXTENSION TEAM...06 FIELD WORKER.....07 PRIVATE DOCTOR.....08 HAKIM/HOMOEOPATH.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE)....11 TRADITIONAL BIRTH ATTENDANT....12 FRIENDS/RELATIVES.....13 OTHER_____14 (SPECIFY)	→347 →347
345	How long does it take to travel from your home to this place? آپ کے گھر سے وہاں پہنچنے میں کتنا وقت لگتا ہے ؟ IF LESS THAN 60 MINUTES, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES.....1 HOURS.....2 DK.....998	
346	Is it easy or difficult to get there? وہاں پہنچنا آسان ہے یا مشکل ؟	EASY.....1 DIFFICULT.....2 DK.....8	
347	In the last month, have you heard a message about family planning on: the radio? television? پچھلے مہینے میں کیا آپ نے خاندانی منصوبہ بندی کے بارے میں ریڈیو یا ٹیلی وژن پر کوئی پیغام سنا ہے ؟	YES NO RADIO.....1 2 TELEVISION.....1 2	
348	CHECK 347: HEARD MESSAGE (ANY YES IN 347) NOT HEARD MESSAGE		→350
349	Do you think that the message you heard was effective or not effective in persuading couples to use family planning? آپ نے جو پیغام سُنا کیا آپ کے خیال میں وہ میاں بیوی کو خاندانی منصوبہ بندی کے طریقے استعمال کرنے پر آمادہ کرنے کے لئے مؤثر ہے یا غیر مؤثر ہے ؟	EFFECTIVE.....1 NOT EFFECTIVE.....2 DK.....8	
350	Is it acceptable to you or not for family planning information to be provided on the radio or television? آپ کے لئے یہ بات قابلِ قبول ہے یا قابلِ قبول نہیں ہے کہ خاندانی منصوبہ بندی کی معلومات ریڈیو یا ٹیلی وژن پر مہیا کی جائیں ؟	ACCEPTABLE.....1 NOT ACCEPTABLE.....2 DK.....8	

401 CHECK 222 :
ONE OR MORE BIRTHS SINCE JAN. 1986 ☐ → NO BIRTHS SINCE JAN. 1986 ☐ → (SKIP TO 501)

402 ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1986 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL FORMS).

Now I would like to ask you some more questions about the health of children you had in the past five years. (We will talk about one child at a time.)
اب میں آپ سے کچھ اور سوالات اُن بچوں کی صحت کے بارے میں کرنا چاہوں گی
جو پچھلے پانچ برسوں میں آپ کے ہاں پیدا ہوئے۔ (ہم ایک وقت میں ایک بچے کے بارے میں بات کریں گے)

	LINE NUMBER FROM Q. 212	☐☐	☐☐	☐☐
	FROM Q. 212 AND Q. 216	LAST BIRTH NAME _____ ALIVE ☐ DEAD ☐	NEXT-TO-LAST BIRTH NAME _____ ALIVE ☐ DEAD ☐	SECOND-FROM-LAST BIRTH NAME _____ ALIVE ☐ DEAD ☐
403	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later or did you want no more children at all? جب آپ حاملہ ہوئیں اور (NAME) آپ کے پیٹ میں تھا/تھی کیا اسوقت آپ حمل چاہتی تھیں یا چاہتی تھیں کہ کچھ وقت کے بعد ہوتا یا آپ کو مزید بچوں کی قطعاً کوئی خواہش نہیں تھی ؟	THEN.....1 (SKIP TO 405) LATER.....2 NO MORE.....3 (SKIP TO 405)	THEN.....1 (SKIP TO 405) LATER.....2 NO MORE.....3 (SKIP TO 405)	THEN.....1 (SKIP TO 405) LATER.....2 NO MORE.....3 (SKIP TO 405)
404	How much longer would you like to have waited? آپ کتنا عرصہ انتظار کرنا چاہتی تھیں ؟ (RECORD MONTHS OR YEARS)	MONTHS.....1 ☐☐ YEARS.....2 DK.....998	MONTHS.....1 ☐☐ YEARS.....2 DK.....998	MONTHS.....1 ☐☐ YEARS.....2 DK.....998
405	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? جب (NAME) آپ کے پیٹ میں تھا/تھی تو کیا اُسکی پیدائش سے پہلے آپ اپنا پینگی طبی معائنہ کرانے کے لیے کسی کے پاس گئی تھیں ؟ IF YES: کس کے پاس گئی تھیں؟ کسی اور کے پاس بھی گئی تھیں ؟ (CIRCLE ALL PERSONS SEEN ON ANY VISIT)	DOCTOR.....1 NURSE.....1 LADY HEALTH VISITOR.....1 FAMILY WELFARE WORKER....1 TRAINED (TRADITIONAL) BIRTH ATTENDANT.....1 TRADITIONAL BIRTH ATTENDANT.....1 OTHER_____1 (SPECIFY) NO ONE.....1 (SKIP TO 409)	DOCTOR.....1 NURSE.....1 LADY HEALTH VISITOR.....1 FAMILY WELFARE WORKER....1 TRAINED (TRADITIONAL) BIRTH ATTENDANT.....1 TRADITIONAL BIRTH ATTENDANT.....1 OTHER_____1 (SPECIFY) NO ONE.....1 (SKIP TO 411)	DOCTOR.....1 NURSE.....1 LADY HEALTH VISITOR.....1 FAMILY WELFARE WORKER....1 TRAINED (TRADITIONAL) BIRTH ATTENDANT.....1 TRADITIONAL BIRTH ATTENDANT.....1 OTHER_____1 (SPECIFY) NO ONE.....1 (SKIP TO 411)
406	Were you given an antenatal card for this pregnancy? کیا اُس حمل کی دیکھ بھال کے لیے آپ کو کارڈ دیا گیا تھا ؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8

		LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
407	How many months pregnant were you when you first saw someone for an antenatal check on that pregnancy? آپکو اُس وقت کتنے ماہ کا حمل تھا جب آپ معائنہ کرانے کیلئے پہلی مرتبہ کسی کے پاس گئی تھیں ؟	MONTHS.............. [ ][ ] DK......................98	MONTHS.............. [ ][ ] DK......................98	MONTHS.............. [ ][ ] DK......................98
408	How many antenatal visits did you have during that pregnancy? اُس حمل کے دوران آپ کتنی مرتبہ معائنہ کرانے گئی تھیں ؟	NUMBER OF VISITS.... [ ][ ] DK......................98	NUMBER OF VISITS.... [ ][ ] DK......................98 (SKIP TO 411)	NUMBER OF VISITS.... [ ][ ] DK......................98 (SKIP TO 411)
409	Did anyone advise you to eat more food than usual during that pregnancy? کیا کسی نے آپ کو یہ مشورہ دیا تھا کہ اُس حمل کے دوران معمول سے زیادہ خوراک کھائیں	YES......................1 NO.......................2		
410	Were you weighed at any time during that pregnancy? کیا اُس حمل کے دوران کبھی آپ کا وزن کیا گیا تھا ؟	YES......................1 NO.......................2		
411	When you were pregnant with (NAME) were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? جب آپ کے پیٹ میں (NAME) تھا/تھی تو آپ کے بازو میں ٹیکہ لگا تھا تاکہ پیدائش کے بعد بچہ تشنج (جسم میں اینٹھن کی بیماری) سے محفوظ رہے ؟	YES......................1 NO.......................2 (SKIP TO 413)← DK.......................8	YES......................1 NO.......................2 (SKIP TO 413)← DK.......................8	YES......................1 NO.......................2 (SKIP TO 413)← DK.......................8
412	How many times did you get this injection? آپ کو یہ انجیکشن کتنی مرتبہ لگایا گیا تھا ؟	TIMES.................. [ ] DK.......................8	TIMES.................. [ ] DK.......................8	TIMES.................. [ ] DK.......................8
413	Where did you give birth to (NAME)? (NAME) کہاں پیدا ہوا تھا/ہوئی تھی ؟	YOUR HOME...............01 OTHER HOME..............02 GOVERNMENT HOSPITAL.....03 RHC/BHU/GOVT CLINIC.....04 PRIVATE HOSPITAL/CLINIC.05 OTHER________________06 (SPECIFY)	YOUR HOME...............01 OTHER HOME..............02 GOVERNMENT HOSPITAL.....03 RHC/BHU/GOVT CLINIC.....04 PRIVATE HOSPITAL/CLINIC.05 OTHER________________06 (SPECIFY)	YOUR HOME...............01 OTHER HOME..............02 GOVERNMENT HOSPITAL.....03 RHC/BHU/GOVT CLINIC.....04 PRIVATE HOSPITAL/CLINIC.05 OTHER________________06 (SPECIFY)
414	Who delivered (NAME) or assisted with the delivery? Anyone else? (NAME) کا کیس کس نے کیا تھا اور کس کس نے مدد کی تھی؟ اِن کے علاوہ کسی اور نے بھی؟ (CIRCLE ALL PERSONS ASSISTING)	DOCTOR...................1 NURSE....................1 LADY HEALTH VISITOR......1 FAMILY WELFARE WORKER....1 TRAINED (TRADITIONAL) BIRTH ATTENDANT.........1 TRADITIONAL BIRTH ATTENDANT...............1 OTHER__________________1 (SPECIFY) NO ONE...................1	DOCTOR...................1 NURSE....................1 LADY HEALTH VISITOR......1 FAMILY WELFARE WORKER....1 TRAINED (TRADITIONAL) BIRTH ATTENDANT.........1 TRADITIONAL BIRTH ATTENDANT...............1 OTHER__________________1 (SPECIFY) NO ONE...................1 (SKIP TO 416)	DOCTOR...................1 NURSE....................1 LADY HEALTH VISITOR......1 FAMILY WELFARE WORKER....1 TRAINED (TRADITIONAL) BIRTH ATTENDANT.........1 TRADITIONAL BIRTH ATTENDANT...............1 OTHER__________________1 (SPECIFY) NO ONE...................1 (SKIP TO 416)

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
415	How long were you in labor? آپ کو دردِ زہ کتنی دیر رہا ؟	HOURS..... ☐☐ DK.....98		
416	Was (NAME) born on time or prematurely? کیا (NAME) پورے دنوں کا پیدا ہوا تھا / کی پیدا ہوئی تھی، یا قبل از وقت ؟	ON TIME.....1 PREMATURELY.....2 DK.....8	ON TIME.....1 PREMATURELY.....2 DK.....8	ON TIME.....1 PREMATURELY.....2 DK.....8
417	Was (NAME) delivered by caesarian section? کیا (NAME) اپریشن کے ذریعہ پیدا ہوا تھا / پیدا ہوئی تھی ؟	YES.....1 NO.....2	YES.....1 NO.....2	YES.....1 NO.....2
418	Was (NAME) weighed at birth? کیا (NAME) کی پیدائش کے وقت وزن کیا گیا تھا ؟	YES.....1 NO.....2 (SKIP TO 420) DK.....8	YES.....1 NO.....2 (SKIP TO 420) DK.....8	YES.....1 NO.....2 (SKIP TO 420) DK.....8
419	How much did (NAME) weigh? (NAME) کا کتنا وزن تھا ؟	KG.....1 ☐.☐☐☐ POUNDS OUNCES POUNDS....2 ☐☐ ☐☐ DK.....99998	KG.....1 ☐.☐☐☐ POUNDS OUNCES POUNDS....2 ☐☐ ☐☐ DK.....99998	KG.....1 ☐.☐☐☐ POUNDS OUNCES POUNDS....2 ☐☐ ☐☐ DK.....99998
420	When (NAME) was born, was he/she: very large, larger than average, average, smaller than average, or very small? جب (NAME) پیدا ہوا / پیدا ہوئی تو کیا یہ بہت بڑا تھا / بڑی تھی ؟ اوسط سے بڑا تھا / بڑی تھی ؟ اوسط درجے کا تھا / کی تھی ؟ اوسط سے چھوٹا تھا / چھوٹی تھی ؟ یا بہت چھوٹا تھا / چھوٹی تھی ؟	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DK.....8	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DK.....8 (SKIP TO 422)	VERY LARGE.....1 LARGER THAN AVERAGE.....2 AVERAGE.....3 SMALLER THAN AVERAGE.....4 VERY SMALL.....5 DK.....8 (SKIP TO 422)
421	Has your period returned since the birth of (NAME)? کیا (NAME) کی پیدائش کے بعد آپ کو دوبارہ ماہواری شروع ہو چکی ہے ؟	YES .....1 (SKIP TO 423) NO.....2 (SKIP TO 424)		
422	Did your period return between the birth of (NAME) and your next pregnancy? کیا (NAME) کی پیدائش اور آپ کے اگلے حمل کے درمیان آپ کو ماہواری پھر شروع ہوئی تھی ؟		YES .....1 NO.....2 (SKIP TO 426)	YES .....1 NO.....2 (SKIP TO 426)
423	For how many months after the birth of (NAME) did you not have a period? (NAME) کی پیدائش کے کتنے مہینے بعد تک آپ کو ماہواری نہیں آئی ؟	MONTHS..... ☐☐ DK.....98	MONTHS..... ☐☐ DK.....98 (SKIP TO 426)	MONTHS..... ☐☐ DK.....98 (SKIP TO 426)

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
424	CHECK 224: RESPONDENT PREGNANT?	PREGNANT ☐ (SKIP TO 426) NOT PREGNANT ☐		
425	Have you resumed sexual relations since the birth of (NAME)? کیا آپ نے (NAME) کی پیدائش کے بعد ازدواجی تعلقات کا سلسلہ پھر شروع کر دیا ہے؟	YES....................1 NO.....................2 (SKIP TO 427)		
426	For how many months after the birth of (NAME) did you not have sexual relations? (NAME) کی پیدائش کے بعد آپ نے کتنے عرصہ تک ازدواجی تعلقات نہیں رکھے؟	DAYS..............1 [ ][ ] MONTHS............2 [ ][ ] DK...................998	DAYS..............1 [ ][ ] MONTHS............2 [ ][ ] DK...................998	DAYS..............1 [ ][ ] MONTHS............2 [ ][ ] DK...................998
427	Did you ever breastfeed (NAME)? کیا آپ نے (NAME) کو کبھی اپنا دودھ پلایا؟	YES....................1 (SKIP TO 430) NO.....................2	YES....................1 (SKIP TO 436) NO.....................2	YES....................1 (SKIP TO 436) NO.....................2
428	Who suggested that you should not breastfeed (NAME)? یہ مشورہ آپ کو کس نے دیا تھا کہ (NAME) کو اپنا دودھ نہیں پلانا چاہیئے؟	OWN DECISION...........01 MOTHER.................02 MOTHER-IN-LAW..........03 HUSBAND................04 DOCTOR.................05 OTHER HEALTH WORKER....06 TRADITIONAL BIRTH ATTENDANT.............07 OTHER ______ 08 (SPECIFY)	OWN DECISION...........01 MOTHER.................02 MOTHER-IN-LAW..........03 HUSBAND................04 DOCTOR.................05 OTHER HEALTH WORKER....06 TRADITIONAL BIRTH ATTENDANT.............07 OTHER ______ 08 (SPECIFY)	OWN DECISION...........01 MOTHER.................02 MOTHER-IN-LAW..........03 HUSBAND................04 DOCTOR.................05 OTHER HEALTH WORKER....06 TRADITIONAL BIRTH ATTENDANT.............07 OTHER ______ 08 (SPECIFY)
429	Why did you not breastfeed (NAME)? آپ نے (NAME) کو اپنا دودھ کیوں نہیں پلایا؟	MOTHER ILL/WEAK........01 CHILD ILL/WEAK.........02 CHILD DIED.............03 NIPPLE/BREAST PROBLEM..04 INSUFFICIENT MILK......05 WORKING................06 CHILD REFUSED..........07 MAINTAIN BEAUTY........08 OTHER ______ 09 (SPECIFY) (SKIP TO 438)	MOTHER ILL/WEAK........01 CHILD ILL/WEAK.........02 CHILD DIED.............03 NIPPLE/BREAST PROBLEM..04 INSUFFICIENT MILK......05 WORKING................06 CHILD REFUSED..........07 MAINTAIN BEAUTY........08 OTHER ______ 09 (SPECIFY) (SKIP TO 438)	MOTHER ILL/WEAK........01 CHILD ILL/WEAK.........02 CHILD DIED.............03 NIPPLE/BREAST PROBLEM..04 INSUFFICIENT MILK......05 WORKING................06 CHILD REFUSED..........07 MAINTAIN BEAUTY........08 OTHER ______ 09 (SPECIFY) (SKIP TO 438)
430	How long after birth did you first put (NAME) to the breast? (NAME) کی پیدائش کے کتنی دیر بعد آپ نے پہلی مرتبہ اُسے اپنا دودھ پلایا؟ IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY............000 (SKIP TO 432) HOURS.............1 [ ][ ] DAYS..............2 [ ][ ]		

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		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
431	What was (NAME) fed before you put (him/her) to the breast? (NAME) کو آپ کے دودھ سے پہلے کیا دیا گیا تھا ؟ (CIRCLE ALL MENTIONED)	WATER....................1 GHUTTI...................1 HONEY....................1 SUGAR....................1 OTHER______1 (SPECIFY)		
432	CHECK 216: CHILD ALIVE?	ALIVE ☐ DEAD ☐ (SKIP TO 436)		
433	Are you still breast-feeding (NAME)? کیا آپ ابھی تک (NAME) کو اپنا دودھ پلاتی ہیں ؟	YES......................1 NO.......................2 (SKIP TO 436)		
434	How many times did you breastfeed last night between sunset and sunrise? سورج غروب ہونے اور سورج نکلنے کے درمیان کل رات آپ نے کتنی مرتبہ اپنا دودھ پلایا ؟ (IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER)	NUMBER OF NIGHTTIME FEEDINGS ☐☐		
435	How many times did you breastfeed yesterday during the daylight hours? کل دن کے وقت آپ نے کتنی مرتبہ اپنا دودھ پلایا ؟ (IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER)	NUMBER OF DAYLIGHT FEEDINGS ☐☐ (SKIP TO 439)		
436	For how many months did you breastfeed (NAME)? آپ نے (NAME) کو کتنے مہینے تک اپنا دودھ پلایا ؟	MONTHS.............. ☐☐ UNTIL DIED.............95 (SKIP TO 442)	MONTHS.............. ☐☐ UNTIL DIED.............95 (SKIP TO 445)	MONTHS.............. ☐☐ UNTIL DIED.............95 (SKIP TO 445)
437	What is the main reason that you stopped breastfeeding (NAME)? آپ نے (NAME) کو اپنا دودھ پلانا کیوں بند کر دیا ۔ اس کی بڑی وجہ کیا ہے ؟	MOTHER ILL/WEAK.........01 CHILD ILL/WEAK..........02 CHILD DIED..............03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.......05 WORKING.................06 CHILD REFUSED...........07 WEANING AGE.............08 BECAME PREGNANT.........09 OTHER______10 (SPECIFY)	MOTHER ILL/WEAK.........01 CHILD ILL/WEAK..........02 CHILD DIED..............03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.......05 WORKING.................06 CHILD REFUSED...........07 WEANING AGE.............08 BECAME PREGNANT.........09 OTHER______10 (SPECIFY)	MOTHER ILL/WEAK.........01 CHILD ILL/WEAK..........02 CHILD DIED..............03 NIPPLE/BREAST PROBLEM...04 INSUFFICIENT MILK.......05 WORKING.................06 CHILD REFUSED...........07 WEANING AGE.............08 BECAME PREGNANT.........09 OTHER______10 (SPECIFY)
438	CHECK 216: CHILD ALIVE?	ALIVE ☐ DEAD ☐ (SKIP TO 442)	ALIVE ☐ DEAD ☐ (SKIP TO 446) (SKIP TO 445)	ALIVE ☐ DEAD ☐ (SKIP TO 446) (SKIP TO 445)

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
439	At any time yesterday or last night was (NAME) given any of the following?: کسی دن میں یا کل رات میں کسی وقت کو مندرجہ ذیل چیزوں میں (NAME) سے کوئی چیز دی گئی تھی؟	YES NO		
	Plain water? (IF YES: How many times?) سادہ پانی	PLAIN WATER.....1 2 # OF TIMES.....		
	Ghutti? (IF YES: How many times?) گھٹی تو کتنی مرتبہ؟ IF YES:	GHUTTI.....1 2 # OF TIMES.....		
	Sugar or honey water? (IF YES: How many times?) چینی یا شہد ملا پانی؟ تو کتنی مرتبہ IF YES:	SUGAR/HONEY WATER...1 2 # OF TIMES.....		
	Juice? (IF YES: How many times?) جوس یا پھلوں کا رس؟ تو کتنی مرتبہ؟ IF YES:	JUICE.....1 2 # OF TIMES.....		
	Herbal tea? (IF YES: How many times?) جڑی بوٹیوں کی چائے؟ تو کتنی مرتبہ؟ IF YES:	HERBAL TEA.....1 2 # OF TIMES.....		
	Gripe water? (IF YES: How many times?) گرائپ واٹر؟ تو کتنی مرتبہ؟ IF YES:	GRIPE WATER.....1 2 # OF TIMES.....		
	Baby formula? (IF YES: How many times?) بے بی فارمولا؟ تو کتنی مرتبہ؟ IF YES:	BABY FORMULA.....1 2 # OF TIMES.....		
	Fresh milk? (IF YES: How many times?) تازہ دودھ؟ تو کتنی مرتبہ؟ IF YES:	FRESH MILK.....1 2 # OF TIMES.....		
	Tinned or powdered milk? (IF YES: How many times?) ڈبے والا یا خشک دودھ؟ تو کتنی مرتبہ؟ IF YES:	TINNED/POWDRD MILK..1 2 # OF TIMES.....		
	Other liquids, such as fennel water or cardamom water? (IF YES: How many times?) کوئی اور پینے والی چیزیں مثلاً سونف کا پانی یا الائچی کا پانی تو کتنی مرتبہ؟ IF YES:	OTHER LIQUIDS.....1 2 # OF TIMES.....		
	Any solid or mushy food? (IF YES: How many times?) کوئی ٹھوس یا نرم غذا؟ تو کتنی مرتبہ IF YES:	SOLID/MUSHY FOOD....1 2 # OF TIMES.....		
440	CHECK 439 : FOOD OR LIQUID GIVEN YESTERDAY?	YES TO ONE OR MORE ☐ → NO TO ALL ☐ → (SKIP TO 442)		

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
441	Did (NAME) drink anything from a bottle with a nipple yesterday or last night? کیا (NAME) نے کل دن میں یا گزشتہ رات نپل والی بوتل سے کچھ پیا تھا ؟	YES.....1 (SKIP TO 443) NO.....2 DK.....8		
442	Was (NAME) ever given anything to drink from a bottle with a nipple? کیا (NAME) کو کبھی نپل والی بوتل سے کچھ دیا گیا تھا ؟	YES.....1 NO.....2 (SKIP TO 444) DK.....8		
443	How many months old was (NAME) when he/she started drinking from a bottle with a nipple on a regular basis? (NAME) کتنے مہینے کا تھا/تھی جب اس نے نپل والی بوتل سے باقاعدگی سے پینا شروع کیا تھا ؟	AGE IN MONTHS..... NEVER GIVEN REGULARLY..96 (SKIP TO 446)		
444	CHECK 439 : FOOD OR LIQUID GIVEN YESTERDAY?	YES TO ONE OR MORE → (SKIP TO 446) NO TO ALL		
445	Was (NAME) ever given any water, or something else to drink or eat (other than breastmilk)? کیا (NAME) کو (ماں کے دودھ کے علاوہ) کبھی پانی یا کوئی اور چیز پینے یا کھانے کو دی گئی ؟	YES.....1 NO.....2 (SKIP TO 449)	YES.....1 NO.....2 (SKIP TO 449)	YES.....1 NO.....2 (SKIP TO 449)

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
446	How many months old was (NAME) when you started giving the following on a regular basis?: کتنے مہینے کا تھا/کی تھی (NAME) جب آپ نے اُسے مندرجہ ذیل چیزیں باقاعدہ دینا شروع کی تھیں ؟			
	Formula or milk other than breastmilk? اپنے دُودھ کے علاوہ فارمولا یا دوسرا دُودھ ؟	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	Water? پانی ؟	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	Other liquids? دوسری پینےوالی چیزیں ؟	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	Any solid or mushy food? کوئی ٹھوس یا نرم غذا ؟	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN.....96
	IF LESS THAN 1 MONTH, RECORD '00'.			
447	CHECK 446: AGE IN MONTHS GIVEN FOR SOLID OR MUSHY FOOD?	YES ☐ NO ☐ (SKIP TO 449)	YES ☐ NO ☐ (SKIP TO 449)	YES ☐ NO ☐ (SKIP TO 449)
448	How many months old was (NAME) when you started giving him/her solid or mushy foods every day? کتنے مہینے کا تھا/تھی جب آپ نے اُسے روزانہ ٹھوس یا نرم غذا دینا شروع کی تھی ؟	AGE IN MONTHS..... ☐☐ NOT GIVEN EVERY DAY.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN EVERY DAY.....96	AGE IN MONTHS..... ☐☐ NOT GIVEN EVERY DAY.....96
449	**********GO BACK TO 403 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 450**********			

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450 ENTER THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1986 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL FORMS).

	LINE NUMBER FROM Q. 212			
	FROM Q. 212 AND Q. 216	LAST BIRTH NAME _____ ALIVE ☐ DEAD ☐	NEXT-TO-LAST BIRTH NAME _____ ALIVE ☐ DEAD ☐	SECOND-FROM-LAST BIRTH NAME _____ ALIVE ☐ DEAD ☐
451	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it, please? کیا آپ کے پاس کوئی ایسا کارڈ ہے جس پر (NAME) کو لگائے گئے حفاظتی ٹیکوں کا اندراج ہو IF YES: تو کیا میں دیکھ سکتی ہوں؟	YES, SEEN.....1 (SKIP TO 453) YES, NOT SEEN.....2 (SKIP TO 455) NO CARD.....3	YES, SEEN.....1 (SKIP TO 453) YES, NOT SEEN.....2 (SKIP TO 455) NO CARD.....3	YES, SEEN.....1 (SKIP TO 453) YES, NOT SEEN.....2 (SKIP TO 455) NO CARD.....3
452	Did you ever have a vaccination card for (NAME)? کیا آپ کے پاس کبھی (NAME) کے حفاظتی ٹیکوں کا کارڈ تھا؟	YES.....1 (SKIP TO 455) NO.....2	YES.....1 (SKIP TO 455) NO.....2	YES.....1 (SKIP TO 455) NO.....2
453	(1) COPY VACCINATION DATES FOR EACH VACCINE FROM THE CARD. (2) WRITE '44' IN 'DAY' COLUMN, IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE RECORDED.	DAY MO YR	DAY MO YR	DAY MO YR
	BCG	BCG	BCG	BCG
	POLIO 0 (AT BIRTH)	P0	P0	P0
	POLIO 1	P1	P1	P1
	POLIO 2	P2	P2	P2
	POLIO 3	P3	P3	P3
	DPT 1	D1	D1	D1
	DPT 2	D2	D2	D2
	DPT 3	D3	D3	D3
	MEASLES	MEA	MEA	MEA
454	Has (NAME) received any vaccinations that are not recorded on this card? کیا (NAME) کو کبھی کوئی ایسے حفاظتی ٹیکے لگا ہیں کا اندراج اس کارڈ پر نہیں کیا گیا؟	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 453) NO.....2 DK.....8 (SKIP TO 457)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 453) NO.....2 DK.....8 (SKIP TO 457)	YES.....1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 453) NO.....2 DK.....8 (SKIP TO 457)

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		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
455	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases? کیا (NAME) کو کبھی بیماریوں سے بچاؤ کے ٹیکے لگے ہیں ؟	YES.....1 NO.....2 (SKIP TO 457) DK.....8	YES.....1 NO.....2 (SKIP TO 457) DK.....8	YES.....1 NO.....2 (SKIP TO 457) DK.....8
456	Please tell me if (NAME) (has) received any of the following vaccinations: (NAME) برائے مہربانی بتایئں کہ کو کبھی مندرجہ ذیل میں سے کوئی ٹیکہ لگا ہے ؟			
	A BCG vaccination against tuberculosis, that is, an injection in the arm that left a scar? تپ دق سے بچاؤ کے لیے بی سی جی کا ، یعنی بازو میں انجیکشن جس کا نشان رہ گیا ہو ؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
	Polio vaccine, that is, drops in the mouth? پولیو کی دوا یعنی قطرے جو منہ میں ڈالے جاتے ہیں ؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
	IF YES: How many times? IF YES: وہ قطرے کتنی مرتبہ پلائے ؟	NUMBER OF TIMES.....	NUMBER OF TIMES.....	NUMBER OF TIMES.....
	An injection against measles? خسرہ سے بچاؤ کا ٹیکہ ؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
457	CHECK 216: CHILD ALIVE?	ALIVE ☐ DEAD ☐ (SKIP TO 462)	ALIVE ☐ DEAD ☐ (SKIP TO 462)	ALIVE ☐ DEAD ☐ (SKIP TO 462)
458	Did a doctor or a health worker tell you about the cause of death of (NAME)? کیا کسی ڈاکٹر یا ہیلتھ ورکر نے آپ کو (NAME) کی موت کی وجہ بتائی ؟	YES.....1 NO.....2 (SKIP TO 460)	YES.....1 NO.....2 (SKIP TO 460)	YES.....1 NO.....2 (SKIP TO 460)

		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
459	What did they say was the cause of death? انہوں نے موت کی کیا وجہ بتائی تھی؟ (CIRCLE ALL CAUSES MENTIONED)	FEVER.....1 DIARRHEA.....1 COUGH.....1 MEASLES.....1 VOMITING.....1 CONVULSIONS.....1 OTHER ______ 1 (SPECIFY) (SKIP TO 461)←	FEVER.....1 DIARRHEA.....1 COUGH.....1 MEASLES.....1 VOMITING.....1 CONVULSIONS.....1 OTHER ______ 1 (SPECIFY) (SKIP TO 461)←	FEVER.....1 DIARRHEA.....1 COUGH.....1 MEASLES.....1 VOMITING.....1 CONVULSIONS.....1 OTHER ______ 1 (SPECIFY) (SKIP TO 461)←
460	What do you believe was the cause of death of (NAME)? آپ کے خیال میں موت کی کیا وجہ تھی؟ (CIRCLE ALL CAUSES MENTIONED)	FEVER.....1 DIARRHEA.....1 COUGH.....1 MEASLES.....1 VOMITING.....1 CONVULSIONS.....1 OTHER ______ 1 (SPECIFY)	FEVER.....1 DIARRHEA.....1 COUGH.....1 MEASLES.....1 VOMITING.....1 CONVULSIONS.....1 OTHER ______ 1 (SPECIFY)	FEVER.....1 DIARRHEA.....1 COUGH.....1 MEASLES.....1 VOMITING.....1 CONVULSIONS.....1 OTHER ______ 1 (SPECIFY)
461	**********GO BACK TO 451 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, SKIP TO 490**********			
462	Has (NAME) been ill with a fever at any time in the last 2 weeks? کیا (NAME) کو گزشتہ دو ہفتوں میں کسی وقت بخار رہا ہے؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
463	Has (NAME) been ill with a cough at any time in the last 2 weeks? کیا (NAME) کو گزشتہ دو ہفتوں میں کسی وقت کھانسی رہی؟	YES.....1 NO.....2 (SKIP TO 467)← DK.....8	YES.....1 NO.....2 (SKIP TO 467)← DK.....8	YES.....1 NO.....2 (SKIP TO 467)← DK.....8
464	Has (NAME) been ill with a cough in the last 24 hours? کیا (NAME) کو گزشتہ چوبیس گھنٹے میں کھانسی ہوئی؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
465	For how many days (has the cough lasted/did the cough last)? کھانسی کتنے دن رہی / (کھانسی کتنے دن سے ہے)؟ IF LESS THAN 1 DAY, RECORD '00'	DAYS.....[ ][ ]	DAYS.....[ ][ ]	DAYS.....[ ][ ]
466	When (NAME) had the illness with a cough, did he/she breathe faster than usual with short, rapid breaths? جب (NAME) کو کھانسی تھی کیا وہ معمول سے تیز تیز سانس لیتا تھا / لیتی تھی؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8

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		LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
467	CHECK 462 AND 463: FEVER OR COUGH?	"YES" IN EITHER 462 OR 463 ☐ OTHER ☐ → (SKIP TO 471)	"YES" IN EITHER 462 OR 463 ☐ OTHER ☐ → (SKIP TO 471)	"YES" IN EITHER 462 OR 463 ☐ OTHER ☐ → (SKIP TO 471)
468	What was given to treat the fever/cough, if anything? Anything else? بخار/کھانسی کے علاج کے لئے اگر کوئی چیز دی گئی تو وہ کیا چیز تھی؟ اس کے علاوہ کوئی اور چیز؟ (CIRCLE EACH MENTIONED)	NO TREATMENT.............1 INJECTION................1 ANTIBIOTIC (PILL OR SYRUP).........1 ANTIMALARIAL (PILL OR SYRUP).........1 COUGH SYRUP..............1 OTHER PILL OR SYRUP......1 UNKNOWN PILL OR SYRUP....1 HOME REMEDY/ HERBAL MEDICINE.........1 OTHER______________1 (SPECIFY)	NO TREATMENT.............1 INJECTION................1 ANTIBIOTIC (PILL OR SYRUP).........1 ANTIMALARIAL (PILL OR SYRUP).........1 COUGH SYRUP..............1 OTHER PILL OR SYRUP......1 UNKNOWN PILL OR SYRUP....1 HOME REMEDY/ HERBAL MEDICINE.........1 OTHER______________1 (SPECIFY)	NO TREATMENT.............1 INJECTION................1 ANTIBIOTIC (PILL OR SYRUP).........1 ANTIMALARIAL (PILL OR SYRUP).........1 COUGH SYRUP..............1 OTHER PILL OR SYRUP......1 UNKNOWN PILL OR SYRUP....1 HOME REMEDY/ HERBAL MEDICINE.........1 OTHER______________1 (SPECIFY)
469	Did you seek advice or treatment for the fever/cough? کیا آپ نے بخار/کھانسی کے علاج کے لئے مشورہ یا دوا لی تھی؟	YES......................1 NO.......................2 (SKIP TO 471)←	YES......................1 NO.......................2 (SKIP TO 471)←	YES......................1 NO.......................2 (SKIP TO 471)←
470	From whom did you seek advice or treatment? Anyone else? آپ نے کس سے مشورہ یا دوا لی تھی؟ اور کسی سے؟ (CIRCLE EACH MENTIONED)	GOVERNMENT HOSPITAL......1 RHC/BHU/GOVT CLINIC......1 PRIVATE HOSPITAL/CLINIC..1 PRIVATE DOCTOR...........1 FAMILY WELFARE WORKER....1 LADY HEALTH VISITOR......1 HOMOEOPATH...............1 HAKIM....................1 FAITH HEALER.............1 DRUGSTORE................1 SHOP (OTHER THAN DRUGSTORE)..............1 OTHER______________1 (SPECIFY)	GOVERNMENT HOSPITAL......1 RHC/BHU/GOVT CLINIC......1 PRIVATE HOSPITAL/CLINIC..1 PRIVATE DOCTOR...........1 FAMILT WELFARE WORKER....1 LADY HEALTH VISITOR......1 HOMOEOPATH...............1 HAKIM....................1 FAITH HEALER.............1 DRUGSTORE................1 SHOP (OTHER THAN DRUGSTORE)..............1 OTHER______________1 (SPECIFY)	GOVERNMENT HOSPITAL......1 RHC/BHU/GOVT CLINIC......1 PRIVATE HOSPITAL/CLINIC..1 PRIVATE DOCTOR...........1 FAMILY WELFARE WORKER....1 LADT HEALTH VISITOR......1 HOMOEOPATH...............1 HAKIM....................1 FAITH HEALER.............1 DRUGSTORE................1 SHOP (OTHER THAN DRUGSTORE)..............1 OTHER______________1 (SPECIFY)
471	Has (NAME) had diarrhea in the last two weeks? کیا (NAME) کو گزشتہ دو ہفتوں میں دست کی بیماری ہوئی؟	YES......................1 (SKIP TO 473)← NO.......................2 DK.......................8	YES......................1 (SKIP TO 473)← NO.......................2 DK.......................8	YES......................1 (SKIP TO 473)← NO.......................2 DK.......................8
472	**********GO BACK TO 451 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, SKIP TO 490**********			
473	Has (NAME) had diarrhea in the last 24 hours? کیا (NAME) کو گزشتہ چوبیس گھنٹے میں دست آئے تھے؟	YES......................1 NO.......................2 DK.......................8	YES......................1 NO.......................2 DK.......................8	YES......................1 NO.......................2 DK.......................8
474	For how many days (has the diarrhea lasted/did the diarrhea last)? دست کتنے دن رہے؟ یا کتنے دن سے ہیں؟ IF LESS THAN 1 DAY, RECORD '00'	DAYS............... ☐☐	DAYS............... ☐☐	DAYS............... ☐☐

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		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
475	Was there any blood in the stools? کیا پاخانے کے ساتھ خون آیا تھا ؟	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8 (SKIP TO 479)	YES.....1 NO.....2 DK.....8 (SKIP TO 479)
476	CHECK 427/433: LAST CHILD STILL BREASTFED?	YES ☐ NO ☐ (SKIP TO 479)		
477	During (NAME)'s diarrhea, did you change the frequency of breastfeeding? کیا (NAME) کو دستوں کے دوران آپ نے اپنا دودھ پلانے کی تعداد میں کوئی تبدیلی کی تھی ؟	YES.....1 NO.....2 (SKIP TO 479)		
478	Did you increase the frequency of breastfeeding or reduce the frequency or did you stop completely? کیا آپ نے اپنا دودھ زیادہ دفعہ پلایا، کم دفعہ پلایا یا بالکل بند کر دیا ؟	INCREASED.....1 REDUCED.....2 STOPPED COMPLETELY.....3		
479	(Aside from breastmilk) Was (NAME) given the same amount to drink as before the diarrhea, or more, or less? (ماں کے دودھ کے علاوہ) کیا (NAME) کو پینے کے لئے کوئی چیز اتنی ہی مقدار میں دی گئی جتنی کہ دستوں سے پہلے دی جاتی تھی یا مقدار زیادہ یا کم کی گئی تھی؟	SAME.....1 MORE.....2 LESS.....3 DK.....8	SAME.....1 MORE.....2 LESS.....3 DK.....8	SAME.....1 MORE.....2 LESS.....3 DK.....8
480	Was (NAME) given the same amount of food as before the diarrhea, or more, or less? کیا (NAME) کو اتنی ہی مقدار میں خوراک دی گئی تھی جتنی کہ دستوں سے پہلے دی جاتی تھی یا مقدار زیادہ یا کم کی گئی تھی ؟	SAME.....1 MORE.....2 LESS.....3 DK.....8	SAME.....1 MORE.....2 LESS.....3 DK.....8	SAME.....1 MORE.....2 LESS.....3 DK.....8
481	Was (NAME) given a fluid made from a special packet? کیا (NAME) کو ایک خصوصی پیکٹ سے تیار کردہ محلول دیا گیا تھا یعنی نمکول یا ORS	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8

No.	Question	LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
482	Was (NAME) given any of the following during the diarrhea: کیا (NAME) کو دستوں کے دوران مندرجہ ذیل میں سے کوئی چیز دی گئی تھی؟			
	Rice water? پیچ یعنی چاولوں کا پانی؟	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8
	Lassi? چھاچھ یعنی لسّی؟	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8
	A home-made fluid made from sugar, salt and water? چینی نمک اور پانی سے گھر میں تیار کردہ محلول؟	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8
	Any other home-made fluid? گھر میں تیار کردہ کوئی اور پینے والی چیز؟	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8	YES....1 NO....2 DK....8
483	CHECK 481 AND 482: CHILD GIVEN FLUID FROM PACKET (481) AND/OR ANY HOME-MADE FLUID (482)?	YES GIVEN FLUID (PKT./HOME) ☐ NO FLUID ☐ (SKIP TO 485)	YES GIVEN FLUID (PKT./HOME) ☐ NO FLUID ☐ (SKIP TO 485)	YES GIVEN FLUID (PKT./HOME) ☐ NO FLUID ☐ (SKIP TO 485)
484	For how many days was (NAME) given this fluid? (NAME) کو یہ محلول کتنے دن دیا گیا؟ IF LESS THAN 1 DAY, RECORD '00'	DAYS....☐☐ DK....98	DAYS....☐☐ DK....98	DAYS....☐☐ DK....98
485	Was anything given for the diarrhea (other than this fluid)? کیا دست کے لئے (اس محلول کے علاوہ) کوئی اور چیز دی گئی تھی؟	YES....1 NO....2 (SKIP TO 487) DK....8	YES....1 NO....2 (SKIP TO 487) DK....8	YES....1 NO....2 (SKIP TO 487) DK....8
486	What was given to treat the diarrhea? Anything else? دست کے علاج کے لئے کیا دیا گیا تھا؟ کوئی اور چیز؟ (CIRCLE ALL MENTIONED)	ANTIBIOTIC PILL OR SYRUP....1 OTHER PILL OR SYRUP....1 UNKNOWN PILL OR SYRUP....1 INJECTION....1 (I.V.) INTRAVENOUS....1 HOME REMEDIES/ HERBAL MEDICINES....1 OTHER ______ (SPECIFY)....1	ANTIBIOTIC PILL OR SYRUP....1 OTHER PILL OR SYRUP....1 UNKNOWN PILL OR SYRUP....1 INJECTION....1 (I.V.) INTRAVENOUS....1 HOME REMEDIES/ HERBAL MEDICINES....1 OTHER ______ (SPECIFY)....1	ANTIBIOTIC PILL OR SYRUP....1 OTHER PILL OR SYRUP....1 UNKNOWN PILL OR SYRUP....1 INJECTION....1 (I.V.) INTRAVENOUS....1 HOME REMEDIES/ HERBAL MEDICINES....1 OTHER ______ (SPECIFY)....1
487	Did you seek advice or treatment for the diarrhea? کیا آپ نے دست کے علاج کے لئے کوئی مشورہ یا دوائی لی تھی؟	YES....1 NO....2 (SKIP TO 489)	YES....1 NO....2 (SKIP TO 489)	YES....1 NO....2 (SKIP TO 489)

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
488	From whom did you seek advice or treatment? Anyone else? آپ نے کس سے مشورہ یا دوا لی تھی؟ اور کسی سے ؟ (CIRCLE ALL MENTIONED)	GOVERNMENT HOSPITAL.....1 RHC/BHU/GOVT CLINIC.....1 PRIVATE DOCTOR.....1 PRIVATE HOSPITAL/CLINIC..1 FAMILY WELFARE WORKER....1 LADY HEALTH VISITOR.....1 HOMOEOPATH.....1 HAKIM.....1 FAITH HEALER.....1 DRUGSTORE.....1 SHOP (OTHER THAN DRUGSTORE).....1 OTHER _____ (SPECIFY)	GOVERNMENT HOSPITAL.....1 RHC/BHU/GOVT CLINIC.....1 PRIVATE HOSPITAL/CLINIC..1 PRIVATE DOCTOR.....1 FAMILY WELFARE WORKER....1 LADY HEALTH VISITOR.....1 HOMOEOPATH.....1 HAKIM.....1 FAITH HEALER.....1 DRUGSTORE.....1 SHOP (OTHER THAN DRUGSTORE).....1 (SPECIFY)	GOVERNMENT HOSPITAL.....1 RHC/BHU/GOVT CLINIC.....1 PRIVATE HOSPITAL/CLINIC..1 PRIVATE DOCTOR.....1 FAMILY WELFARE WORKER....1 LADY HEALTH VISITOR.....1 HOMOEOPATH.....1 HAKIM.....1 FAITH HEALER.....1 DRUGSTORE.....1 (SPECIFY)
489	**********GO BACK TO 451 FOR NEXT BIRTH; OR, IF NO MORE BIRTHS, GO TO 490**********			

490 Check 481:

ORS SOLUTION MENTIONED (ANY YES IN 481)

ORS SOLUTION NOT MENTIONED

481 NOT ASKED OR

491	Have you ever heard of a special product called ORS or Nimkol (or LOCAL NAME) you can get for the treatment of diarrhea? کیا آپ نے کبھی ایک خاص دوا O R S یا نمکول کا نام سنا ہے جو آپ دست کے علاج کے لئے لے سکتی ہیں ؟	YES.....1 →493 NO.....2
492	Have you ever seen a packet like this before? کیا آپ نے پہلے کبھی ایسا پیکٹ دیکھا ہے ؟	YES.....1 NO.....2 →501
493	Have you ever prepared a solution with one of these packets to treat diarrhea in yourself or someone else? کیا آپ نے دست کی صورت میں اپنے یا کسی اور کے علاج کے لئے ایسے پیکٹ سے کبھی محلول تیار کیا ہے؟ (SHOW PACKETS)	YES.....1 NO.....2 →496

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
494	Did you prepare the whole packet at once or only part of the packet? کیا آپ نے پورے پیکٹ سے تیار کیا یا پیکٹ کے کچھ حصہ سے؟	WHOLE PACKET AT ONCE.....1 ONLY PART OF PACKET.....2	→496
495	How much water did you use to prepare (LOCAL NAME)? (نمکول) تیار کرنے کے لئے آپ نے کتنا پانی استعمال کیا تھا؟	100 ML. GLASSES/CUPS.....1 200 ML. GLASSES/CUPS.....2 250 ML. GLASSES/CUPS.....3 500 ML. GLASSES/CUPS.....4 UNKNOWN SIZE GLASSES/CUPS.5 1 SEER CONTAINER.....990 1/2 SEER CONTAINER.....991 1/4 SEER CONTAINER.....992 OTHER_____ (SPECIFY) 996 DK.....998	
496	Where can you get the (LOCAL NAME) packet? PROBE: Anywhere else? آپ (نمکول) کا پیکٹ کہاں سے حاصل کر سکتی ہیں؟ PROBE: کہیں اور سے بھی؟ (CIRCLE ALL PLACES MENTIONED)	GOVERNMENT HOSPITAL.....1 RHC/BHU/GOVERNMENT CLINIC.....1 PRIVATE HOSPITAL/CLINIC.....1 PRIVATE DOCTOR.....1 FAMILY WELFARE WORKER.....1 LADY HEALTH VISITOR.....1 HAKIM/HOMOEOPATH.....1 DRUGSTORE.....1 SHOP (OTHER THAN DRUGSTORE).....1 OTHER_____ (SPECIFY) 1 DK.....1	
497	CHECK 482: SUGAR/SALT/WATER FLUID MENTIONED (ANY YES IN 482) ☐ ↓ SUGAR/SALT/WATER FLUID NOT MENTIONED OR 482 NOT ASKED ☐		→501
498	Who taught you to prepare the home-made fluid made from sugar, salt and water? آپ کو کس نے گھر میں تیار کردہ چینی، نمک اور پانی سے محلول بنانا سکھایا؟	GOVERNMENT HOSPITAL.....01 RHC/BHU/GOVT CLINIC.....02 PRIVATE HOSPITAL/CLINIC.....03 PRIVATE DOCTOR.....04 FAMILY WELFARE WORKER.....05 LADY HEALTH VISITOR.....06 HOMOEOPATH.....07 HAKIM.....08 IMMUNIZATION TEAM MEMBER.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE)....11 RADIO/TV.....12 FRIEND/RELATIVE.....13 OTHER_____ (SPECIFY) 14	

SECTION 5. MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
501	CHECK 107: CURRENTLY MARRIED (CODE 1 IN 107) ☐ ↓ NOT CURRENTLY MARRIED (CODE 2-5 IN 107) ☐		→509
502	Are you living with your husband now or is he staying elsewhere? کیا آپ آج کل اپنے شوہر کے ساتھ رہتی ہیں یا وہ کہیں اور رہتے ہیں ؟	LIVING WITH HIM.....1 STAYING ELSEWHERE.....2	→504
503	In the last four weeks, were you and your husband always living together or were you apart some of the time or all of the time? گزشتہ چار ہفتوں میں کیا آپ اور آپ کے شوہر ہمیشہ ساتھ رہے یا آپ کچھ وقت الگ رہیں یا تمام وقت الگ رہیں ؟	ALWAYS LIVING TOGETHER.....1 APART SOME OF THE TIME.....2 APART ALL OF THE TIME.....3	→506
504	During the last four weeks, were you and your husband apart all of the time or did you stay together any of the time? گزشتہ چار ہفتوں میں کیا آپ اور آپ کے شوہر تمام وقت ایک دوسرے سے الگ رہے یا کچھ عرصہ ساتھ بھی رہے ؟	APART ALL OF THE TIME.....1 STAYED TOGETHER SOME OF TIME....2	→506
505	For how long have you and your husband been living apart? آپ اور آپ کے شوہر کتنے عرصہ سے الگ ہیں ؟ (RECORD MONTHS OR YEARS)	MONTHS.....1 YEARS.....2	
506	Does your husband have any other wives besides yourself? کیا آپ کے شوہر کی آپ کے علاوہ اور بیویاں بھی ہیں ؟	YES.....1 NO.....2	→509
507	How many other wives does he have? اُن کی اور کتنی بیویاں ہیں ؟	NUMBER..... DK.....8	→509
508	Are you the first, second,...wife? کیا آپ پہلی بیوی ہیں یا دوسری ..... ؟	RANK.....	
509	(Is/was) there a blood relationship between you and your husband? کیا آپ اور آپ کے شوہر کے درمیان خون کا کوئی رشتہ ہے (تھا)؟	YES.....1 NO.....2	→511
510	What type of relationship (is/was) it? وہ کیا رشتہ ہے (تھا) ؟	FIRST COUSIN ON FATHER'S SIDE...1 FIRST COUSIN ON MOTHER'S SIDE...2 SECOND COUSIN.....3 OTHER RELATION_____4 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
511	How old were you when you started living with your (first) husband? آپ کی کیا عمر تھی جب آپ نے اپنے (پہلے) شوہر کے ساتھ رہنا شروع کیا تھا ؟	AGE..... ☐☐	
512	In what month and year did you start living with him? آپ نے کس مہینے اور سال میں ان کے ساتھ رہنا شروع کیا تھا ؟ COMPARE 511 AND 512 WITH 105 AND 106. MAKE CORRECTIONS IF INCONSISTENT.	MONTH..... ☐☐ DK MONTH.....98 YEAR..... ☐☐ DK YEAR.....98	
513	PRESENCE OF OTHERS AT THIS POINT.	YES NO CHILD(REN) UNDER 10.....1 2 HUSBAND.....1 2 OTHER MALE(S).....1 2 MOTHER-IN-LAW.....1 2 OTHER FEMALE(S).....1 2	

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SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
601	CHECK 322: NEITHER STERILIZED → (continue) HE OR SHE STERILIZED →		→608
602	CHECK 107: CURRENTLY MARRIED (CODE 1 IN 107) → (continue) NOT CURRENTLY MARRIED (CODE 2-5 IN 107) →		→615
603	CHECK 224: **NOT PREGNANT OR UNSURE:** Now I have some questions about the future. Would you like to have (a/another) child or would you prefer not to have any (more) children? اب میں کچھ سوالات مستقبل کے بارے میں کروں گی۔ کیا آپ چاہتی ہیں کہ آپ کے ہاں (ایک اور) بچہ ہو یا آپ اس بات کو ترجیح دیں گی کہ (اور) بچے نہ ہوں ؟ **PREGNANT:** Now I have some questions about the future. After the child you are expecting, would you like to have another child or would you prefer not to have any more children? اب میں کچھ سوالات مستقبل کے بارے میں کروں گی۔ اپنے ہونے والے بچے کی پیدائش کے بعد کیا آپ چاہیں گی کہ آپ کے ہاں ایک اور بچہ ہو یا اس بات کو ترجیح دینگی کہ اور بچے نہ ہوں ؟	HAVE A (ANOTHER) CHILD.....1 NO MORE/NONE.....2 SAYS SHE CAN'T GET PREGNANT.....3 UP TO GOD.....4 UNDECIDED OR DK.....8	→611
604	Would you prefer your next child to be a boy or a girl or doesn't it matter? کیا آپ چاہیں گی کہ آپ کا آئندہ بچہ لڑکا ہو، یا لڑکی یا اس سے کوئی فرق نہیں پڑتا ؟	BOY.....1 GIRL.....2 DOESN'T MATTER.....3	
605	CHECK 224: **NOT PREGNANT OR UNSURE:** How long would you like to wait from now before the birth of (a/another) child? آپ اب سے (ایک اور) بچے کی پیدائش تک کتنا عرصہ انتظار کرنا پسند کریں گی ؟ **PREGNANT:** How long would you like to wait after the birth of the child you are expecting before the birth of another child? آپ ہونے والے بچے کی پیدائش کے بعد ایک اور بچے کی پیدائش تک کتنا عرصہ انتظار کرنا پسند کریں گی ؟ (IF NUMERICAL ANSWER GIVEN, RECORD MONTHS OR YEARS)	MONTHS.....1 [ ][ ] YEARS.....2 [ ][ ] SOON/NOW.....994 SAYS SHE CAN'T GET PREGNANT...995 OTHER _____ 996 (SPECIFY) DK.....998	→611

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
606	CHECK 216 AND 224: HAS LIVING CHILDREN OR PREGNANT? YES ☐ NO ☐		→611
607	CHECK 224: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐ How old would you like your youngest child to be when your next child is born? آپ کیا چاہیں گی کہ آپ کے سب سے چھوٹے بچے کی عمر کتنی ہو جب آپ کے ہاں آئندہ بچے کی پیدائش ہو؟ How old would you like the child you are expecting to be when your next child is born? آپ کیا چاہیں گی کہ آپ کا ہونے والا بچہ کتنی عمر کا ہو جب آپ کے ہاں آئندہ بچے کی پیدائش ہو؟	AGE OF YOUNGEST YEARS..... DK.....98	→611
608	Do you regret that (you/your husband) had the operation not to have any (more) children? (آپ نے / آپ کے شوہر نے) مزید بچوں کی پیدائش سے بچنے کے لئے جو آپریشن کرا لیا تھا، کیا آپ کو اُس پر افسوس ہے؟	YES.....1 NO.....2	→610
609	Why do you regret it? آپ کو اس پر افسوس کیوں ہے؟	RESPONDENT WANTS ANOTHER CHILD..1 HUSBAND WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 OTHER REASON_____4 (SPECIFY)	→615
610	Given your present circumstances, if you had to do it over again, do you think you would make the same decision to have a sterilization? اپنے موجودہ حالات کو مدنظر رکھتے ہوئے اگر آپ کو دوبارہ فیصلہ کرنا پڑے تو آپ کا کیا خیال ہے کہ آپ پھر نس بندی کرانے کا ہی فیصلہ کریں گی؟	YES.....1 NO.....2	→615
611	Do you think that your husband approves or disapproves of couples using a method to avoid pregnancy? آپ کے خیال میں آپ کے شوہر خاندانی منصوبہ بندی کرنے والے میاں بیویوں کو اچھا سمجھتے ہیں یا بُرا؟	APPROVES.....1 DISAPPROVES.....2 DK.....8	
612	How often have you and your husband talked about family planning in the past year? گزشتہ سال میں آپ اور آپ کے شوہر نے کتنی مرتبہ خاندانی منصوبہ بندی کے بارے میں بات چیت کی؟	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3	
613	Have you and your husband ever discussed the number of children you would like to have? کیا آپ اور آپ کے شوہر نے کبھی اس بارے میں تبادلۂ خیال کیا ہے کہ آپ کے کتنے بچے ہونا چاہئیں؟	YES.....1 NO.....2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
614	Do you think your husband wants the same number of children that you want, or does he want more or fewer than you want? کیا آپ سمجھتی ہیں کہ آپ کے شوہر اتنی ہی تعداد میں بچے چاہتے ہیں جتنے آپ چاہتی ہیں یا وہ آپ کے مقابلے میں زیادہ بچے چاہتے ہیں یا کم ؟	SAME NUMBER.....1 MORE CHILDREN.....2 FEWER CHILDREN.....3 DK.....8	
615	How long should a husband and wife wait before starting sexual intercourse after the birth of a baby? بچے کی پیدائش کے بعد شوہر اور بیوی کو ازدواجی تعلقات شروع کرنے سے پہلے کتنا عرصہ انتظار کرنا چاہیئے ؟ (IF ANSWER IS NUMERIC, RECORD DAYS OR MONTHS OR YEARS)	DAYS.....1 MONTHS.....2 YEARS.....3 OTHER _____ 996 (SPECIFY)	
616	Should a mother wait until she has completely stopped breastfeeding before starting to have sexual relations again, or doesn't it matter? کیا ایک ماں کو ازدواجی تعلقات دوبارہ شروع کرنے سے پہلے اُس وقت تک انتظار کرنا چاہیئے جب تک بچے کو اپنا دودھ پلانے کا سلسلہ مکمل طور پر بند نہ کرے یا اس سے کوئی فرق نہیں پڑتا ؟	WAIT.....1 DOESN'T MATTER.....2	
617	In general, do you approve or disapprove of couples using a method to avoid pregnancy? عام طور پر آپ خاندانی منصوبہ بندی کرنے والے میاں بیویوں کو اچھا سمجھتی ہیں یا بُرا ؟	APPROVE.....1 DISAPPROVE.....2	
618	CHECK 216: NO LIVING CHILDREN ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be? اگر آپ کو اپنی پوری زندگی میں بچوں کی کل تعداد منتخب کرنے کا اختیار ہوتا تو آپ کتنے بچے چاہتیں ؟ HAS LIVING CHILDREN ☐ → If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? اگر آپ اُس وقت میں لوٹ جائیں جب آپ کے کوئی بچے نہیں تھے اور آپ کو بچوں کی کُل تعداد منتخب کرنے کا اختیار ہوتا تو آپ پوری زندگی میں کتنے بچے چاہتیں ؟	NUMBER..... ☐☐ UP TO GOD, ALLAH.....95 → 620 OTHER ANSWER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
619	How many of these children would you like to be boys and how many would you like to be girls? آپ کیا چاہتی ہیں کہ ان میں سے کتنے لڑکے ہوتے اور کتنی لڑکیاں ؟	BOYS GIRLS EITHER NUMBER.. ☐☐ ☐☐ ☐☐ UP TO GOD, ALLAH.....999995 OTHER_____ 999996 (SPECIFY)	
620	We would like to know how much schooling you would like your children to have. (IF NOT STERILIZED: Consider the children you already have and also any children that you might have in the future). First, let's talk about sons. What is the highest level of school that you would like any of your sons to attend? ہم یہ جاننا چاہیں گے کہ آپ اپنے بچوں کی تعلیم کے بارے میں کیا چاہیں گی (IF NOT STERILIZED میرا مطلب آپ کے موجودہ اور ہونے والے تمام بچوں سے ہے) ۔ پہلے ہم بیٹوں کے بارے میں بات کرتے ہیں ۔ آپ کیا چاہیں گی کہ آپ کے بیٹوں میں سے کوئی زیادہ سے زیادہ کس درجہ تک تعلیم حاصل کرے؟	NONE.....1 PRIMARY SCHOOL.....2 MIDDLE SCHOOL.....3 SECONDARY SCHOOL.....4 HIGHER.....5 OTHER_____ 6 (SPECIFY) DK.....8	
621	And how about daughters? What is the highest level of schooling that you would like any of your daughters to attend? اور بیٹیوں کے بارے میں آپکا کیا خیال ہے ؟ آپ کیا چاہیں گی کہ بیٹیوں میں سے کوئی زیادہ سے زیادہ کس درجہ تک تعلیم حاصل کرے ؟	NONE.....1 PRIMARY SCHOOL.....2 MIDDLE SCHOOL.....3 SECONDARY SCHOOL.....4 HIGHER.....5 OTHER_____ 6 (SPECIFY) DK.....8	
622	What do you think is the ideal age at marriage for boys? آپ کے خیال میں لڑکوں کی شادی کے لیئے کونسی عمر بہترین ہے ؟	IDEAL AGE IN YEARS..... ☐☐ OTHER_____ 96 (SPECIFY)	
623	And what is the ideal age at marriage for girls? اور لڑکیوں کی شادی کے لیے کونسی عمر بہترین ہے ؟	IDEAL AGE IN YEARS..... ☐☐ OTHER_____ 96 (SPECIFY)	
624	If you needed to go to a health clinic or a hospital, could you go by yourself or would you need to be accompanied by someone? اگر آپ کو شفا خانے یا ہسپتال جانے کی ضرورت پڑجائے تو آپ تنہا جاسکتی ہیں یا کسی کے ساتھ کی ضرورت ہو گی ؟	COULD GO BY SELF ..... 1 WOULD NEED TO BE ACCOMPANIED.. 2 IT DEPENDS 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
701	CHECK 107: CURRENTLY MARRIED (CODE 1 IN 107) ☐ ↓ NOT CURRENTLY MARRIED (CODE 2-5 IN 107) ☐		→703
702	How old is your husband in completed years? آپ کے شوہر کتنے برس کے ہو چکے ہیں ؟	AGE IN COMPLETED YEARS..... ☐☐ DK.....98	
703	ASK QUESTIONS BELOW ABOUT CURRENT OR MOST RECENT HUSBAND Did your (last) husband ever attend school? کیا آپ کے (آخری) شوہر نے کبھی اسکول میں تعلیم پائی ؟	YES.....1 NO.....2	→706
704	What was the highest level of school he attended: primary, middle, secondary, or higher? انہوں نے زیادہ سے زیادہ کس درجہ تک تعلیم حاصل کی : پرائمری ، مڈل، سیکنڈری یا اس سے زیادہ ؟	PRIMARY .....1 MIDDLE.....2 SECONDARY.....3 HIGHER.....4 DK.....8	→706
705	What was the highest class he completed at that level? انہوں نے اُس درجہ پر کس کلاس تک تعلیم حاصل کی ؟	CLASS..... ☐☐ DK.....98	
706	What kind of work does (did) your (last) husband mainly do? آپ کے (آخری) شوہر زیادہ تر کس قسم کا کام کرتے ہیں/کرتے تھے؟	☐☐ _____ _____ _____	
707	CHECK 706: WORKS (WORKED) IN AGRICULTURE ☐ ↓ DOES (DID) NOT WORK IN AGRICULTURE ☐		→709
708	(Does/did) your husband work mainly on his own land or family land, or (does/did) he rent land, or (does/did) he work on someone else's land? کیا آپ کے شوہر زیادہ تر اپنی یا اپنے خاندان کی زمین پر کام کرتے ہیں/کرتے تھے ۔ یا انہوں نے زمین کرائے پر لے رکھی ہے/رکھی تھی یا وہ کسی اور کی زمین پر کام کرتے ہیں/کرتے تھے ؟	HIS/FAMILY LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
709	Aside from your own housework, are you currently working? اپنے گھریلو کام کاج کے علاوہ کیا اِن دِنوں آپ کوئی اور کام بھی کر رہی ہیں ؟	YES.....1 NO.....2	→712
710	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. Are you currently doing any of these things or any other work? جیسا کہ آپ جانتی ہیں کہ کچھ عورتیں معاوضہ کے لئے کام کرتی ہیں۔ جو کہ نقد یا جنس کی صورت میں ادا کیا جاتا ہے۔ اور کچھ عورتیں اشیاء فروخت کرتی ہیں۔ چھوٹا موٹا کاروبار کرتی ہیں۔ یا خاندان کے کاروبار میں ہاتھ بٹاتی ہیں۔ کیا آپ اِن دِنوں ان میں سے کوئی کام کر رہی ہیں۔ یا کوئی اور کام کر رہی ہیں ؟	YES.....1 NO.....2	→712
711	If you could find a suitable job, would you like to work? اگر آپ کو کوئی موزوں کام مِل جائے تو کیا آپ کام کرنا پسند کریں گی ؟	YES.....1 NO.....2 DK.....8	→719
712	What is your occupation, that is, what kind of work do you do? آپ کا پیشہ کیا ہے ؟ یعنی آپ کس قسم کا کام کرتی ہیں ؟	_____ ☐☐ _____ _____	
713	In your current work, do you work for a member of your family, for someone else, or are you self-employed? آپ کے موجودہ کام میں کیا آپ اپنے خاندان کے کسی فرد کے لئے کام کرتی ہیں۔ کسی اور کیلئے کام کرتی ہیں یا یہ آپ کا اپنا کام ہے ؟	FOR FAMILY MEMBER.....1 FOR SOMEONE ELSE.....2 SELF-EMPLOYED.....3	
714	Do you earn cash for this work? PROBE: Do you make money for working? کیا آپ کو اِس کام سے نقد آمدنی ہوتی ہے ؟ کیا آپ کو کام کرنے کے پیسے ملتے ہیں ؟ PROBE:	YES.....1 NO.....2	
715	Do you do this work at home or away from home? آپ یہ کام گھر پر کرتی ہیں یا گھر سے دُور کام کرتی ہیں ؟	HOME.....1 AWAY.....2	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
716	CHECK 215/216/218: HAS CHILD BORN SINCE JAN. 1986 AND LIVING AT HOME?	YES ☐ ↓ / NO ☐	NO → 719
717	While you are working, do you usually have (NAME OF YOUNGEST CHILD AT HOME) with you, sometimes have him/her with you, or never have him/her with you? (NAME OF YOUNGEST CHILD AT HOME) جب آپ کام کر رہی ہوتی ہیں تو کیا عموماً آپ کے ساتھ ہوتا/ہوتی ہے۔ کبھی کبھار آپ کے ساتھ ہوتا ہے/ ہوتی ہے یا وہ کبھی بھی آپ کے ساتھ نہیں ہوتا ہے/ ہوتی ہے؟	USUALLY.....1 → 719 SOMETIMES.....2 NEVER.....3	
718	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working? جب آپ کام کر رہی ہوتی ہیں تو عموماً (NAME OF YOUNGEST CHILD AT HOME) کی دیکھ بھال کون کرتا ہے؟	HUSBAND.....01 OLDER CHILD(REN).....02 GRANDPARENTS.....03 OTHER RELATIVES.....04 NEIGHBORS.....05 FRIENDS.....06 SERVANTS/HIRED HELP.....07 CHILD IS IN SCHOOL.....08 INSTITUTIONAL CHILDCARE.....09 OTHER_____10 (SPECIFY)	
719	Did you work at any time before you (first) got married? کیا آپ نے (پہلی) شادی سے پہلے کبھی کوئی کام کیا تھا؟	YES.....1 NO.....2	
720	Did you work just after you (first) got married? کیا آپ نے (پہلی) شادی کے فوراً بعد کام کیا تھا؟	YES.....1 NO.....2	
721	CHECK 709/710/719/720:	EVER WORKED (ANY YES IN 709/710/719/720) ☐ ↓ / NEVER WORKED ☐	NEVER WORKED → 724
722	How old were you when you first started working? جب آپ نے پہلی بار کام کیا تھا۔ اُس وقت آپ کی عُمر کتنی تھی؟	AGE IN COMPLETED YEARS..... ☐☐	
723	Why did you start working initially? سب سے پہلی بار آپ نے کام کرنا کیوں شروع کیا تھا؟ (CIRCLE ALL REASONS GIVEN)	FINANCIAL NEED.....1 SUPPLEMENT FAMILY'S INCOME.....1 PERSONAL FULFILLMENT.....1 HUSBAND DIED/BECAME ILL.....1 SUBSEQUENT TO DIVORCE/ SEPARATION.....1 OTHER_____1 (SPECIFY)	
724	RECORD THE CURRENT TIME.	HOURS..... ☐☐ MINUTES..... ☐☐	

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SECTION 8. HEIGHT AND WEIGHT

801	CHECK 215, 216: ONE OR MORE LIVING CHILDREN BORN SINCE JAN. 1986 ☐ →	NO LIVING CHILDREN BORN SINCE JAN. 1986 ☐ → END

INTERVIEWER: IN 802-804, RECORD THE LINE NUMBERS, NAMES, AND BIRTH DATES OF ALL LIVING CHILDREN BORN SINCE JANUARY 1, 1986 STARTING WITH THE YOUNGEST CHILD. THEN RECORD 805-811 FOR EACH CHILD.

	[1] YOUNGEST LIVING CHILD	[2] NEXT-TO-YOUNGEST LIVING CHILD	[3] SECOND-TO-YOUNGEST LIVING CHILD
802 LINE NO. FROM Q.212	☐☐	☐☐	☐☐
803 NAME FROM Q.212	(NAME) _____	(NAME) _____	(NAME) _____
804 DATE OF BIRTH FROM Q.215 AND ASK FOR DAY	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐
805 HEIGHT (in cm.)	☐☐☐.☐	☐☐☐.☐	☐☐☐.☐
806 HEIGHT: LYING OR STANDING	LYING.....1 STANDING.....2	LYING.....1 STANDING.....2	LYING.....1 STANDING.....2
807 WEIGHT (in kg.)	☐☐.☐	☐☐.☐	☐☐.☐
808 ARM CIRCUMFER. (in cm.)	☐☐.☐	☐☐.☐	☐☐.☐
809 BCG SCAR ON ARM	SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2	SCAR SEEN.....1 NO SCAR.....2
810 DATE CHILD WEIGHED AND MEASURED	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐	DAY..... ☐☐ MONTH.... ☐☐ YEAR..... ☐☐
811 RESULT	CHILD MEASURED.1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)	CHILD MEASURED.1 CHILD SICK.....2 CHILD NOT PRESENT.....3 CHILD REFUSED..4 MOTHER REFUSED.5 OTHER.....6 (SPECIFY)

812 NAME OF MEASURER: _____ ☐☐☐ NAME OF ASSISTANT: _____ ☐☐☐

INTERVIEWER'S OBSERVATIONS
(To be filled in after completing interview)

Comments About Respondent: _____

_____

_____

Comments on Specific Questions: _____

_____

_____

Any Other Comments: _____

_____

SUPERVISOR'S OBSERVATIONS

_____

_____

_____

_____

Name of Supervisor: _____ Date: _____

EDITOR'S OBSERVATIONS

_____

_____

_____

_____

44

PAKISTAN DEMOGRAPHIC AND HEALTH SURVEY
HUSBAND'S QUESTIONNAIRE - URDU-ENGLISH

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

PROVINCE.....

URBAN/RURAL (urban=1, rural=2).....

MAJOR CITY/DIVISION/DISTRICT.....

CLUSTER NUMBER.....

HOUSEHOLD NUMBER.....

MAJOR CITY/SMALL CITY,TOWN/VILLAGE.....
(major city=1/small city,town=2/village=3)

NAME AND LINE # OF RESPONDENT _____

NAME AND LINE # OF FIRST ELIGIBLE WIFE _____

NAME AND LINE # OF SECOND ELIGIBLE WIFE _____

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR
INTERVIEWER'S NAME				NAME
RESULT*				RESULT
NEXT VISIT: DATE / TIME				TOTAL NUMBER OF VISITS

*RESULT CODES:
1 COMPLETED 3 POSTPONED 5 PARTLY COMPLETED
2 NOT AT HOME 4 REFUSED 6 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE
LANGUAGE OF INTERVIEW.....
NATIVE LANGUAGE OF RESPONDENT.....
TRANSLATOR USED..LANGUAGE CODES: YES...1 NO...2

LANGUAGE CODES:
01 URDU 03 SINDHI 05 BALUCHI 07 SIRAIKI
02 PUNJABI 04 PUSHTO 06 BROHI 08 OTHER _____ (SPECIFY)

	FIELD EDITED BY	OFFICE EDITED BY	KEYED BY	KEYED BY
NAME				
DATE				

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
101	RECORD THE CURRENT TIME.	HOUR..... ☐☐ MINUTES..... ☐☐	
102	First I would like to ask some questions about yourself. For most of the time until you were 12 years old, did you live in a city or in a village? پہلے میں آپ کے بارے میں کچھ سوالات پوچھنا چاہوں گا۔ بارہ سال کی عمر تک آپ زیادہ تر کہاں رہے؟ شہر میں یا گاؤں میں؟	CITY.....1 VILLAGE.....2	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? آپ (NAME OF CURRENT PLACE OF RESIDENCE) میں کب سے رہ رہے ہیں؟	YEARS..... ☐☐ ALWAYS.....95 VISITOR.....96 → 105	
104	Just before you moved here, did you live in a city or in a village? یہاں منتقل ہونے سے فوراً پہلے آپ شہر میں رہتے تھے یا گاؤں میں؟	CITY.....1 VILLAGE.....2	
105	In what month and year were you born? آپ کس سال اور کس مہینے میں پیدا ہوئے تھے؟	MONTH..... ☐☐ DK MONTH.....98 YEAR..... ☐☐ DK YEAR.....98	
106	How old are you in completed years? آپ اپنی عمر کے کتنے سال مکمل کر چکے ہیں؟ COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS..... ☐☐	
107	Have you ever attended school? کیا آپ نے کبھی اسکول میں تعلیم پائی ہے؟	YES.....1 NO.....2 → 111	
108	What is the highest level of school you attended: primary, middle, secondary, or higher? آپ نے کس درجہ تک تعلیم پائی ہے: پرائمری، مڈل، سیکنڈری یا اس سے زیادہ؟	PRIMARY.....1 MIDDLE.....2 SECONDARY.....3 HIGHER.....4	

1

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
109	What is the highest class you completed at that level? آپ نے اُس درجہ پر کس کلاس تک تعلیم مکمل کی ہے ؟	CLASS..... ☐☐	
110	CHECK 108: PRIMARY ☐ MIDDLE OR ABOVE ☐		→113
111	Can you read and understand a letter or newspaper easily, with difficulty, or not at all? کیا آپ اخبار یا خط با آسانی پڑھ اور سمجھ لیتے ہیں، یا مشکل سے، یا بالکل نہیں پڑھ سکتے ؟	EASILY.....1 WITH DIFFICULTY.....2 NOT AT ALL.....3	→114
112	Can you write a simple letter? کیا آپ ایک سادہ خط لکھ سکتے ہیں ؟	YES.....1 NO.....2	
113	Do you usually read a newspaper or magazine at least once a week? کیا آپ عموماً ہفتے میں کم سے کم ایک مرتبہ اخبار یا رسالہ پڑھ لیتے ہیں ؟	YES.....1 NO.....2	
114	Do you usually listen to a radio at least once a week? کیا آپ عموماً ہفتے میں کم سے کم ایک مرتبہ ریڈیو سنتے ہیں ؟	YES.....1 NO.....2	
115	Do you usually watch television at least once a week? کیا آپ عموماً ہفتے میں کم سے کم ایک مرتبہ ٹیلی وژن دیکھتے ہیں ؟	YES.....1 NO.....2	
116	What kind of work do you mainly do? آپ زیادہ تر کس قسم کا کام کرتے ہیں ؟	_____ ☐☐ _____ _____	
117	CHECK 116: WORKS IN AGRICULTURE ☐ DOES NOT WORK IN AGRICULTURE ☐		→201
118	Do you work mainly on your own land or family land, or do you rent land, or do you work on someone else's land? کیا آپ زیادہ تر اپنی یا اپنے خاندان کی زمین پر کام کرتے ہیں یا آپ نے زمین کرایہ پر لے رکھی ہے یا آپ کسی اور کی زمین پر کام کرتے ہیں ؟	OWN/FAMILY LAND.....1 RENTED LAND.....2 SOMEONE ELSE'S LAND.....3	

2

201 Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about?

اب میں خاندانی منصوبہ بندی کے بارے میں بات کرنا چاہوں گا۔ یعنی حمل میں تاخیر کرنے یا اس سے بچنے کے مختلف طریقے یا ذرائع جنہیں کوئی میاں بیوی استعمال کر سکتے ہیں۔ آپ نے کن طریقوں یا ذرائع کے بارے میں سنا ہے؟

CIRCLE CODE 1 IN 202 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
THEN PROCEED DOWN THE COLUMN, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY.
CIRCLE CODE 2 IF METHOD IS RECOGNIZED, AND CODE 3 IF NOT RECOGNIZED.
THEN, FOR EACH METHOD WITH CODE 1 OR 2 CIRCLED IN 202, ASK 203-204 BEFORE PROCEEDING TO THE NEXT METHOD.

	202 Have you ever heard of (METHOD)? آپ نے کبھی (METHOD) کے بارے میں سنا ہے؟ READ DESCRIPTION OF EACH METHOD	203 Have you ever used (METHOD)? کیا آپ نے کبھی (METHOD) استعمال کیا ہے؟	204 Do you know where a person could go to get (METHOD)? کیا آپ جانتے ہیں کہ (METHOD) کہاں سے حاصل کیا جا سکتا ہے؟
01 PILL Women can take a pill every day. گولی: عورتیں روزانہ ایک گولی کھا سکتی ہیں	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
02 IUD Women can have a loop or coil placed inside them by a doctor or a nurse. چھلا: عورتیں کسی ڈاکٹر یا نرس سے اپنے اندر چھلا یا لوپ یا کوائل رکھوا سکتی ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
03 INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months. انجیکشن: عورتیں کسی ڈاکٹر یا نرس سے انجیکشن لگوا سکتی ہیں جس سے وہ کئی ماہ تک حاملہ نہیں ہو سکتیں	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
04 DIAPHRAGM,FOAM,JELLY Women can place a sponge, suppository, diaphragm, jelly or cream inside them before intercourse. ڈایافرام، فوم جیلی: عورتیں مباشرت سے پہلے اپنے اندر اسپنج، بتی، ڈایافرام، جیلی یا کریم رکھ سکتی ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
05 CONDOM Men can use a rubber sheath during sexual intercourse. کنڈوم: مرد مباشرت کے دوران ربڑ کا خول (کنڈوم) استعمال کر سکتے ہیں۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2

	202 Have you ever heard of (METHOD)? کیا آپ نے کبھی (METHOD) کے بارے میں سنا ہے ؟ READ DESCRIPTION OF EACH METHOD	203 Have you ever used (METHOD)? کیا آپ نے کبھی (METHOD) استعمال کیا ہے ؟	204 Do you know where a person could go to get (METHOD)? کیا آپ جانتے ہیں کہ (METHOD) کہاں سے حاصل کیا جا سکتا ہے ؟
06 FEMALE STERILIZATION Women can have an operation to avoid having any more children. عورت کی نس بندی : عورتیں مزید بچوں کی پیدائش سے بچنے کے لیے آپریشن کرا سکتی ہیں	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	YES.....1 NO.....2
07 MALE STERILIZATION Men can have an operation to avoid having any more children. مرد کی نس بندی : مرد مزید بچوں کی پیدائش سے بچنے کے لیے آپریشن کرا سکتے ہیں ۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	Have you ever had an operation to avoid having any more children? کیا آپ نے کبھی آپریشن کرایا ہے تاکہ مزید بچے نہ ہو سکیں ؟ YES.....1 NO.....2	YES.....1 NO.....2
08 PERIODIC ABSTINENCE Couples can avoid having sexual intercourse on certain days of the month when the woman is more likely to become pregnant. وقتی پرہیز : میاں بیوی اُن دنوں میں مباشرت سے پرہیز کر سکتے ہیں جب عورت کے حاملہ ہونے کا زیادہ امکان ہوتا ہے ۔	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	Do you know where a person can obtain advice on how to use periodic abstinence? کیا آپ جانتے ہیں کہ وقتی پرہیز کے متعلق مشورہ کہاں سے لیا جا سکتا ہے ؟ YES.....1 NO.....2
09 WITHDRAWAL Men can be careful and pull out before climax. عزل : مرد احتیاط کر سکتے ہیں اور اخراج سے پہلے جُدا ہو سکتے ہیں	YES/SPONT.....1 YES/PROBED.....2 NO.....3	YES.....1 NO.....2	
10 Have you heard of any other ways or methods that women or men can use to avoid pregnancy? کیا آپ نے کسی اور طریقے یا ذریعہ کے بارے میں سُنا ہے جسے عورتیں یا مرد استعمال کر کے حمل کو ٹال سکتے ہیں ؟ 1 _____ (SPECIFY) 2 _____ (SPECIFY) 3 _____ (SPECIFY)	YES/SPONT.....1 NO.....3	YES.....1 NO.....2 YES.....1 NO.....2 YES.....1 NO.....2	

205 CHECK 203: NOT A SINGLE "YES" (NEVER USED) ☐ ↓ AT LEAST ONE "YES" (EVER USED) ☐ → SKIP TO 208

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
206	Have you or your wife ever used anything or tried in any way to delay or avoid a pregnancy? کیا آپ نے یا آپ کی بیوی نے کبھی کوئی چیز استعمال کی یا کوئی طریقہ آزمایا تاکہ بچہ پیدا کرنے میں تاخیر کی جاسکے یا بچا جاسکے؟	YES.....1 NO.....2	→225
207	What have you used or done? آپ نے کیا چیز استعمال کی یا کون سا طریقہ آزمایا ؟ CORRECT 203-205 (AND 202 IF NECESSARY).		
208	Now I would like to ask you about the time when you first did something or used a method to avoid a pregnancy? What method did you use at that time? اب میں آپ سے پوچھنا چاہتا ہوں کہ بچوں کی پیدائش سے بچنے کے لیے آپ نے خاندانی منصوبہ بندی کا جو طریقہ پہلی مرتبہ استعمال کیا وہ طریقہ کیا تھا ؟	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY)	
209	How many living children did you have at that time, if any? اُس وقت آپ کے کتنے زندہ بچے تھے ؟ IF NONE, RECORD '00'.	NUMBER OF CHILDREN.....	
210	CHECK 203(07): HUSBAND NOT STERILIZED ☐ ↓ HUSBAND STERILIZED ☐		→213A
211	Are you and your wife currently doing something or using any method to delay or avoid a pregnancy? کیا آپ اور آپ کی بیوی تاخیر یا بچاؤ کے لیے اِن دنوں کوئی طریقہ استعمال کر رہے ہیں ؟	YES.....1 NO.....2	→213
212	What is the main reason you and your wife are not using a method to delay or avoid a pregnancy? اِسکی بڑی وجہ کیا ہے کہ آپ بچہ کی پیدائش میں تاخیر یا بچاؤ کے لیے کوئی چیز یا طریقہ استعمال نہیں کر رہے ہیں ؟	WANTS (MORE) CHILDREN.....01 LACK OF KNOWLEDGE.....02 WIFE OPPOSED.....03 COST TOO MUCH.....04 WORRY ABOUT SIDE EFFECTS.....05 HEALTH CONCERNS.....06 HARD TO GET METHODS.....07 RELIGION.....08 OPPOSED TO FAMILY PLANNING.....09 FATALISTIC.....10 OTHER PEOPLE OPPOSED.....11 INFREQUENT SEX.....12 HARD FOR WIFE TO GET PREGNANT..13 WIFE MENOPAUSAL/HAD HYSTRECTMY.14 INCONVENIENT.....15 WIFE ABSENT.....16 WIFE BREASTFEEDING.....17 WIFE IS CURRENTLY PREGNANT.....18 OTHER_____19 (SPECIFY) DK.....98	→225

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
213 213A	Which method are you using? آپ کونسا طریقہ استعمال کر رہے ہیں ؟ CIRCLE '07' FOR MALE STERILIZATION.	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY)	→219 →216 →219 →224
214	Do you know the brand name of the pills your wife is now using? آپ کی بیوی آجکل جو گولیاں استعمال کر رہی ہیں کیا آپ کو اُن کا نام معلوم ہے ؟ (RECORD NAME OF BRAND.)	BRAND NAME_____ ☐☐ DK.....98	
215	How much does one packet of pills cost you? آپ کو گولیوں کا ایک پیکٹ کتنے میں ملتا ہے ؟	RUPEES..... ☐☐.☐☐ FREE.....9996 DK.....9998	→219
216	May I see the package of condoms you are using now? آپ آجکل جو کنڈوم استعمال کر رہے ہیں کیا میں وہ دیکھ سکتا ہوں ؟ (RECORD NAME OF BRAND.)	PACKAGE SEEN.....1 BRAND NAME_____ ☐☐ PACKAGE NOT SEEN.....2	→218
217	Do you know the brand name of the condoms you are now using? آپ آجکل جو کنڈوم استعمال کر رہے ہیں کیا آپکو ان کا نام معلوم ہے ؟ (RECORD NAME OF BRAND.)	BRAND NAME_____ ☐☐ DK.....98	
218	How much does one condom cost you? آپ کو ایک کنڈوم کتنے میں ملتا ہے ؟	RUPEES..... ☐☐.☐☐ FREE.....9996 DK.....9998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
219	CHECK 213: HE/SHE STERILIZED ☐ → Where did the sterilization take place? آپ کی لس بندی کہاں ہوئی تھی ؟ USING ANOTHER METHOD ☐ → Where did you obtain (METHOD) the last time? آپ نے خاندانی منصوبہ بندی کا (METHOD) آخری مرتبہ کہاں سے حاصل کیا تھا؟ (NAME OF HOSPITAL, CLINIC OR CENTER IF CODE 01-05)	GOVERNMENT HOSPITAL/RHSC.....01 RHC/BHU/GOVERNMENT CLINIC.....02 FAMILY WELFARE CENTER.....03 NGO CENTER.....04 PRIVATE HOSPITAL OR CLINIC.....05 MOBILE CLINIC/EXTENSION TEAM...06 FIELD WORKER.....07 PRIVATE DOCTOR.....08 HAKIM/HOMOEOPATH.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE)....11 TRADITIONAL BIRTH ATTENDANT....12 FRIENDS/RELATIVES.....13 OTHER _____ (SPECIFY) 14 DK.....98	→222 →222
220	How long does it take to travel from your home to this place? آپ کے گھر سے اس جگہ تک پہنچنے میں کتنا وقت لگتا ہے ؟ IF LESS THAN 60 MINUTES, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES.....1 ☐☐ HOURS.....2 ☐☐ DK.....998	
221	Is it easy or difficult to get there? وہاں پہنچنا آسان ہے یا مشکل ؟	EASY.....1 DIFFICULT.....2	
222	CHECK 213: HE/SHE STERILIZED ☐ ↓ USING ANOTHER METHOD ☐		→224
223	In what month and year was the sterilization operation performed? لس بندی کا آپریشن کس مہینے اور سال میں ہوا تھا ؟	MONTH..... ☐☐ YEAR..... ☐☐	→235
224	For how many months have you been using (CURRENT METHOD) continuously? آپ (CURRENT METHOD) مسلسل کتنے مہینے سے استعمال کر رہے ہیں ؟ IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS..... ☐☐ 8 YEARS OR LONGER.....96	→235

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
225	Do you intend to use a method to delay or avoid a pregnancy at any time in the future? کیا آپ مستقبل میں بچہ کے پیدائش میں تاخیر یا بچاؤ کے لیے خاندانی منصوبہ بندی کا کوئی طریقہ اِستعمال کرنے کا اِرادہ رکھتے ہیں ؟	YES.....1 NO.....2 DK.....8	→228 →231
226	What is the main reason you do not intend to use a method? کیا بڑی وجہ ہے کہ آپ خاندانی منصوبہ بندی کا کوئی طریقہ اِستعمال کرنے کا ارادہ نہیں رکھتے ؟	WANTS CHILDREN.....01 LACK OF KNOWLEDGE.....02 WIFE OPPOSED.....03 COST TOO MUCH.....04 WORRY ABOUT SIDE EFFECTS.....05 HEALTH CONCERNS.....06 HARD TO GET METHODS.....07 RELIGION.....08 OPPOSED TO FAMILY PLANNING.....09 FATALISTIC.....10 OTHER PEOPLE OPPOSED.....11 INFREQUENT SEX.....12 HARD FOR WIFE TO GET PREGNANT..13 WIFE MENOPAUSAL/HAD HYSTRECTMY.14 INCONVENIENT.....15 OTHER_____16 (SPECIFY) DK.....98	→231 →231 →231 →231
227	If the decision were entirely up to you, would you want to use a method to delay or avoid a pregnancy at any time in the future? اگر فیصلہ کرنے کے تمام اِختیارات آپ کے پاس ہوں تو کیا آپ مستقبل میں کسی وقت بچوں کی پیدائش میں تاخیر یا بچاؤ کا کوئی طریقہ استعمال کرنا پسند کریں گے ؟	YES.....1 NO.....2 DK.....8	→231
228	Do you intend to use a method within the next 12 months? کیا آپ آئندہ بارہ مہینے کے دوران کوئی طریقہ اِستعمال کرنے کا اِرادہ رکھتے ہیں ؟	YES.....1 NO.....2 DK.....8	
229	When you use a method, which method would you prefer to use? جب آپ خاندانی منصوبہ بندی کریں گے تو کونسا طریقہ اِستعمال کرنے کو ترجیح دیں گے ؟	PILL.....01 IUD.....02 INJECTIONS.....03 DIAPHRAGM/FOAM/JELLY.....04 CONDOM.....05 FEMALE STERILIZATION.....06 MALE STERILIZATION.....07 PERIODIC ABSTINENCE.....08 WITHDRAWAL.....09 OTHER_____10 (SPECIFY) UNSURE.....98	→231
230	Where can you get (METHOD MENTIONED IN 229)? آپ (METHOD MENTIONED IN 229) کہاں سے حاصل کر سکتے ہیں ؟ _____ (NAME OF HOSPIYAL, CLINIC OR CENTER IF CODE 01-05)	GOVERNMENT HOSPITAL/RHSC.....01 RHC/BHU/GOVERNMENT CLINIC.....02 FAMILY WELFARE CENTER.....03 NGO CENTER.....04 PRIVATE HOSPITAL OR CLINIC.....05 MOBILE CLINIC/EXTENSION TEAM...06 FIELD WORKER.....07 PRIVATE DOCTOR.....08 HAKIM/HOMOEOPATH.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE).....11 TRADITIONAL BIRTH ATTENDANT.....12 FRIENDS/RELATIVES.....13 OTHER_____14 (SPECIFY) DK.....98	→233 →235 →233 →235

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
231	Do you know of a place where you can obtain a method of family planning? کیا آپ کو معلوم ہے کہ آپ خاندانی منصوبہ بندی کا طریقہ کہاں سے حاصل کر سکتے ہیں ؟	YES.....1 NO.....2	→235
232	Where is that? وہ جگہ کونسی ہے ؟ (NAME OF HOSPITAL, CLINIC OR CENTER IF CODE 01-05)	GOVERNMENT HOSPITAL/RHSC.....01 RHC/BHU/GOVERNMENT CLINIC.....02 FAMILY WELFARE CENTER.....03 NGO CENTER.....04 PRIVATE HOSPITAL OR CLINIC.....05 MOBILE CLINIC/EXTENSION TEAM...06 FIELD WORKER.....07 →235 PRIVATE DOCTOR.....08 HAKIM/HOMOEOPATH.....09 DRUGSTORE.....10 SHOP (OTHER THAN DRUGSTORE)....11 TRADITIONAL BIRTH ATTENDANT....12 FRIENDS/RELATIVES.....13 OTHER _____ (SPECIFY) 14 →235	
233	How long does it take to travel from your home to this place? آپ کے گھر سے وہاں پہنچنے میں کتنا وقت لگتا ہے ؟ IF LESS THAN 60 MINUTES, RECORD MINUTES. OTHERWISE, RECORD HOURS.	MINUTES.....1 [ ][ ] HOURS.....2 [ ][ ] DK.....998	
234	Is it easy or difficult to get there? وہاں پہنچنا آسان ہے یا مشکل ؟	EASY.....1 DIFFICULT.....2	
235	In the last month, have you heard a message about family planning on: پچھلے مہینے میں کیا آپ نے خاندانی منصوبہ بندی کے بارے میں ریڈیو یا ٹیلی وژن پر کوئی پیغام سنا ہے ؟	YES NO RADIO.....1 2 TELEVISION.....1 2	
236	CHECK 235: HEARD MESSAGE (ANY YES IN 235) ☐ NOT HEARD MESSAGE ☐		→238
237	Do you think that the message you heard was effective or not effective in persuading couples to use family planning? آپ نے جو پیغام سنا کیا آپ کے خیال میں وہ میاں بیوی کو خاندانی منصوبہ بندی کے طریقے استعمال کرنے پر آمادہ کرنے کے لیے موثر ہے یا غیر موثر ؟	EFFECTIVE.....1 NOT EFFECTIVE.....2 DK.....8	
238	Is it acceptable or not acceptable to you for family planning information to be provided on the radio or television? آپ کے لیے یہ بات قابل قبول ہے یا قابل قبول نہیں کہ خاندانی منصوبہ بندی کی معلومات ، ریڈیو یا ٹیلی وژن پر مہیا کی جائیں ؟	ACCEPTABLE.....1 NOT ACCEPTABLE.....2 DK.....8	

SECTION 3: MARRIAGE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
301	Do you have any other wives besides (NAME OF FIRST ELIGIBLE WIFE FROM COVER PAGE)? کے (NAME OF FIRST ELIGIBLE WIFE FROM COVER PAGE) آپکی علاوہ اور بھی بیویاں ہیں ؟	YES.....1 NO.....2	→303
302	How many other wives do you have? آپ کی اور کتنی بیویاں ہیں ؟	NUMBER..... ☐	
303	Have you been married only once or more than once? کیا آپ کی شادی صرف ایک مرتبہ ہوئی یا ایک سے زیادہ مرتبہ ؟	ONCE.....1 MORE THAN ONCE.....2	
304	How old were you when you started living with your (first) wife? آپکی کیا عمر تھی جب آپ نے اپنی (پہلی) بیوی کے ساتھ رہنا شروع کیا ؟	AGE..... ☐☐	
305	In what month and year did you start living with her? آپ نے کس مہینے اور سال میں انکے ساتھ رہنا شروع کیا تھا ؟ COMPARE 304 AND 305 WITH 105 AND 106. MAKE CORRECTIONS IF INCONSISTENT.	MONTH..... ☐☐ DK MONTH.....98 YEAR.....1.. ☐☐ DK YEAR.....98	

306	PRESENCE OF OTHERS AT THIS POINT.		YES	NO
		CHILD(REN) UNDER 10.....	1	2
		WIFE.....	1	2
		FATHER/BROTHER(S).....	1	2
		OTHER MALE(S).....	1	2
		OTHER FEMALE(S).....	1	2

10

SECTION 4. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
401	How many own sons do you have? And how many own daughters do you have? آپ کے اپنے کتنے لڑکے ہیں اور آپ کی اپنی کتنی لڑکیاں ہیں ؟ IF NONE RECORD '00'.	OWN SONS..... OWN DAUGHTERS.....	
402	CHECK 213: NEITHER STERILIZED ☐ → ▽ HE OR SHE STERILIZED ☐		→407
403	Is your wife pregnant now? کیا آپکی بیوی آجکل حاملہ ہیں ؟	YES.....1 NO.....2 UNSURE.....8	
404	CHECK 403 : WIFE NOT PREGNANT OR UNSURE ☐ → ▽ Now I have some questions about the future. Would you like to have (a/another) child or would you prefer not to have any (more) children? اب میں کچھ سوالات مستقبل کے بارے میں کروں گا۔ کیا آپ چاہتے ہیں کہ آپ کے ہاں (ایک اور) بچہ ہو یا آپ اس بات کو ترجیح دیں گے کہ (اور) بچے نہ ہوں ۔ WIFE PREGNANT ☐ → ▽ Now I have some questions about the future. After the child your wife is expecting, would you like to have another child or would you prefer not to have any more children? اب میں کچھ سوالات مستقبل کے بارے میں کروں گا: اس وقت ہونے والے بچے کے بعد کیا آپ چاہیں گے کہ آپ کے ہاں ایک اور بچہ ہو یا اس بات کو ترجیح دیں گے کہ اور بچے نہ ہوں ؟	HAVE A (ANOTHER) CHILD.....1 NO MORE/NONE.....2 SAYS WIFE CAN'T GET PREGNANT....3 UP TO GOD.....4 UNDECIDED OR DK.....8	→410
405	Would you prefer your next child to be a boy or a girl or doesn't it matter? کیا آپ چاہیں گے کہ آپ کا آئندہ بچہ لڑکا ہو یا لڑکی یا اس سے کوئی فرق نہیں پڑتا ؟	BOY.....1 GIRL.....2 DOESN'T MATTER.....3	
406	How long would you like to wait from now before the birth of (a/another) child? آپ اب سے (ایک اور) بچے کی پیدائش تک کتنا عرصہ انتظار کرنا پسند کریں گے ؟	MONTHS.....1 YEARS.....2 SOON/NOW.....994 SAYS WIFE CAN'T GET PREGNANT..995 OTHER _____ 996 (SPECIFY) DK.....998	→410

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
407	Do you regret that (you/your wife) had the operation not to have any (more) children? (آپ نے/آپ کی بیوی نے) مزید بچوں کی پیدائش سے بچنے کے لئے جو آپریشن کرا لیا تھا۔ آپ کو اُس پر افسوس ہے؟	YES.....1 NO.....2	→409
408	Why do you regret it? آپ کو اِس پر افسوس کیوں ہے ؟	RESPONDENT WANTS ANOTHER CHILD..1 WIFE WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 OTHER REASON_____4 (SPECIFY)	→414
409	Given your present circumstances, if you had to do it over again, do you think you would make the same decision to have a sterilization? اپنے موجودہ حالات کو مدِ نظر رکھتے ہوئے اگر آپ کو دوبارہ فیصلہ کرنا پڑے تو آپ کا کیا خیال ہے آپ پھر نس بندی کرانے کا ہی فیصلہ کریں گے ؟	YES.....1 NO.....2	→414
410	Do you think that your wife approves or disapproves of couples using a method to avoid pregnancy? آپکے خیال میں آپکی بیوی خاندانی منصوبہ بندی کرنے والے میاں بیویوں کو اچھا سمجھتی ہیں یا بُرا؟	APPROVES.....1 DISAPPROVES.....2 DK.....8	
411	How often have you talked to your wife about family planning in the past year? گذشتہ سال میں آپ اور آپ کی بیوی نے کتنی مرتبہ خاندانی منصوبہ بندی کے بارے میں بات چیت کی ؟	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3	
412	Have you and your wife ever discussed the number of children you would like to have? کیا آپ اور آپ کی بیوی نے کبھی اس بارے میں تبادلہ خیال کیا ہے کہ آپکے کتنے بچے ہوئے چاہئیں ؟	YES.....1 NO.....2	
413	Do you think your wife wants the same number of children that you want, or does she want more or fewer than you want? کیا آپ کے خیال میں آپکی بیوی بھی اتنی ہی تعداد میں بچے چاہتی ہیں جتنے آپ چاہتے ہیں یا وہ آپ کے مقابلہ میں زیادہ بچے چاہتی ہیں یا کم ؟	SAME NUMBER.....1 MORE CHILDREN.....2 FEWER CHILDREN.....3 DK.....8	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
414	How long should a husband and wife wait before starting sexual intercourse after the birth of a baby? بچے کی پیدائش کے بعد میاں اور بیوی کو ازدواجی تعلقات شروع کرنے سے پہلے کتنا عرصہ انتظار کرنا چاہئے ؟ (IF ANSWER IS NUMERIC, CODE DAYS OR MONTHS OR YEARS)	DAYS.....1 ☐☐ MONTHS.....2 ☐☐ YEARS.....3 ☐☐ OTHER_____ 996 (SPECIFY)	
415	Should a mother wait until she has completely stopped breastfeeding before starting to have sexual relations again, or doesn't it matter? کیا ایک ماں کو ازدواجی تعلقات شروع کرنے سے پہلے اُس وقت تک انتظار کرنا چاہیئے جب تک بچے کو اپنا دودھ پلانا مکمل طور پر بند نہ کر دے یا اِس سے کوئی فرق نہیں پڑتا ؟	WAIT.....1 DOESN'T MATTER.....2	
416	In general, do you approve or disapprove of couples using a method to avoid pregnancy? عام طور پر آپ خاندانی منصوبہ بندی کرنے والے میاں بیویوں کو اچھا سمجھتے ہیں یا بُرا ؟	APPROVE.....1 DISAPPROVE.....2	
417	CHECK 401: NO LIVING CHILDREN ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be? اگر آپ کو اپنی پوری زندگی میں بچوں کی کُل تعداد منتخب کرنے کا اختیار ہوتا تو آپ کتنے بچے چاہتے ؟ HAS LIVING CHILDREN ☐ → If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? اگر آپ اُس وقت میں لوٹ جائیں جب آپکے کوئی بچے نہیں تھے اور آپ کو اپنی پوری زندگی میں بچوں کی کُل تعداد منتخب کرنے کا پورا اختیار ہوتا تو آپ کتنے بچے چاہتے ؟	NUMBER..... ☐☐ UP TO GOD, ALLAH.....95 → 419 OTHER ANSWER_____ 96 (SPECIFY)	
418	How many of these children would you like to be boys and how many would you like to be girls? آپ اِن میں سے کتنے لڑکے اور کتنی لڑکیاں چاہتے ؟	BOYS GIRLS EITHER NUMBER.. ☐☐ ☐☐ ☐☐ UP TO GOD, ALLAH.....999995 OTHER_____ 999996 (SPECIFY)	

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
419	We would like to know how much schooling you expect your children to have. (IF NOT STERILIZED: Consider the children you already have and also any children that you might have in the future). First, let's talk about sons. What is the highest level of school that you would expect any of your sons to attend? ہم یہ جاننا چاہتے ہیں کہ آپ اپنے بچوں کی تعلیم کے بارے میں کیا چاہیں گے (IF NOT STERILIZED میرا مطلب آپ کے موجودہ اور اُن کے بعد ہونے والے تمام بچوں سے ہے)۔ پہلے ہم بیٹوں کے بارے میں بات کریں گے ۔ آپ کیا چاہیں گے آپ کے بیٹوں میں سے کوئی زیادہ سے زیادہ کس درجہ تک تعلیم حاصل کرے ؟	NONE.....1 PRIMARY SCHOOL.....2 MIDDLE SCHOOL.....3 SECONDARY SCHOOL.....4 HIGHER.....5 OTHER_____6 (SPECIFY) DK.....8	
420	And how about daughters? What is the highest level of schooling that you would expect any of your daughters to attend? اور بیٹیوں کے بارے میں آپ کا کیا خیال ہے ۔ آپ کیا چاہیں گے کہ آپ کی بیٹیوں میں سے کوئی زیادہ سے زیادہ کس درجہ تک تعلیم حاصل کرے ؟	NONE.....1 PRIMARY SCHOOL.....2 MIDDLE SCHOOL.....3 SECONDARY SCHOOL.....4 HIGHER.....5 OTHER_____6 (SPECIFY) DK.....8	
421	What do you think is the ideal age at marriage for boys? آپ کے خیال میں لڑکوں کی شادی کے لیے کونسی عمر سب سے بہتر ہوتی ہے ؟	IDEAL AGE IN YEARS..... ☐☐ OTHER_____96 (SPECIFY)	
422	And what is the ideal age at marriage for girls? اور لڑکیوں کی شادی کے لیے کونسی عمر سب سے بہتر ہوتی ہے ؟	IDEAL AGE IN YEARS..... ☐☐ OTHER_____96 (SPECIFY)	
423	If your wife needed to go to a health clinic or a hospital, could she go by herself or would she need to be accompanied by someone else? اگر آپ کی بیوی کو شفا خانہ یا ہسپتال جانے کی ضرورت پڑجائے تو وہ تنہا جاسکتی ہیں یا کسی کے ساتھ کی ضرورت ہوگی؟	COULD GO BY SELF.....1 WOULD NEED TO BE ACCOMPANIED....2 IT DEPENDS 3	
424	RECORD THE CURRENT TIME.	HOUR..... ☐☐ MINUTES..... ☐☐	

INTERVIEWER'S OBSERVATIONS
(To be filled in after completing interview)

Comments About Respondent: _____

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Comments on Specific Questions: _____

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Any Other Comments: _____

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SUPERVISOR'S OBSERVATIONS

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Name of Supervisor: _____ Date: _____

EDITOR'S OBSERVATIONS

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