MONGOLIA

NATIONAL REPORT

Reproductive Health Survey 1998

Reproductive Health Series

National Statistical Office of Mongolia
and
United Nations Population Fund

Reproductive Health Series

Mongolia
Reproductive Health Survey 1998

NATIONAL REPORT

Project: MON/97/P04

NSO
National Statistical Office of Mongolia

UNFPA
United Nations Population Fund

MHSW
Ministry of Health and Social Welfare

UNSD
United Nations Statistics Devision

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CONTENTS

AIDS	acquired immunodeficiency syndrome
ARI	acute respiratory infection
CBR	crude birth rate
CDR	crude death rate
CEB	children even born
GFR	general fertility rate
HIV	human immunodeficiency virus
ICPD	International Conference on Population and Development (1994)
ISSA	Integrated System for Survey Analysis
IUD	intrauterine (contraceptive) device
MOHSW	Ministry of Health and Social Welfare
NN	neonatal mortality
NSO	National Statistical Office
PNN	postneonatal mortality
PSU	primary sampling unit
RHS	Reproductive Health Survey
STDs	sexually transmitted diseases
TFR	total fertility rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNSD	United Nations Statistics Devision
WHO	World Health Organization

The Reproductive Health Survey of Mongolia has truly been a collaborative effort. While principal responsibility for carrying out the survey rested with the National Statistical Office (NSO), the main client is the Ministry of Health and Social Welfare (MOHSW). These two organizations collaborated closely in the design of the survey, in the construction of the questionnaires, and in the interpretation of results.

On the side of the United Nations, this project has also involved the collaboration of two institutions. It has been funded as part of the reproductive health program in Mongolia by the United Nations Population Fund (UNFPA). The execution of the project was given to the United Nations Statistics Division, which was instrumental in the design of the project, and in furnishing a long-term Chief Technical Adviser for the survey. The UNFPA Country Support Team in Bangkok provided training in data processing through the short-term visits of one of its experts.

The survey has been very well executed, in a short period of time. The response rate to the survey was excellent. This report has been prepared within eight months of completion of fieldwork, in both Mongolian and English versions. The report provides a wealth of information on the current demographic and reproductive health situation in Mongolia, but it leaves the door open for further in-depth research of some topics. Why are the survey's findings concerning fertility rates and infant and child mortality rates so at variance with registration statistics? What has been the trend since 1990 in the use of primary health care facilities by women of reproductive age? These and other topics will be investigated by teams of researchers from the NSO, MOHSW and other institutions. The goal will be not only to provide answers, but to strengthen the analytic skills of Mongolian researchers.

Many of the results of the survey are encouraging, including, for example, the high contraceptive prevalence rate; the low level of unwanted fertility; and the lengthy duration of breastfeeding. However, the report also highlights areas for improvement for health managers and policy makers. These include the low percentage of women receiving iron pills during pregnancy; misperceptions in the population concerning the danger of AIDS; and the continuing high prevalence of abortion. Throughout the report it is also evident that there are regional imbalances, and that some areas are relatively worse off when it comes to the provision of health services. This should help to orient the priority activities of health authorities. We hope you find this report useful.

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FOREWORD

The 1998 Mongolian Reproductive and Health Survey (RHS) is the first nationally representative population and health survey in Mongolia. This survey was conducted with funding from the United Nations Population Fund (UNFPA) project "Reproductive Health Survey for Mongolia" (MON/97/PO4). The purpose of this survey was to establish a complete statistical data set on fertility, infant mortality, family planning, maternal health related to antenatal care, pregnancy difficulties and delivery complications. Moreover, through this survey some data on child health, breastfeeding, women's and men's attitude towards family planning and AIDS were collected. This information is important firstly, for the evaluation of the current vital statistics on fertility and infant mortality; secondly, for understanding the factors that influence the reproductive health of women and the health and survival of infants and young children. The output of the survey can be used for policies and programs in relation to maternal and child health in Mongolia. In addition, the results of the survey may suggest some changes in the registration of infant deaths and in the reporting system, or in the use of statistical tools for the measuring of fertility and infant mortality levels in Mongolia. The survey findings are especially important now when the country is in the transition period, because it provides some information on awareness of people about family planning and AIDS. During the socialist period people did not have experiences of using family planning, and similarly, they did not know the danger of AIDS. Overall, the findings of RHS will become a useful source of information necessary for health care reform in Mongolia.

First of all, I wish to give my thanks to Mr. Iqbal Alam, of UNSD, who helped in the creation of the project. National and international staff put in a lot of effort for the successful completion of the RHS and for the publication of this volume. I would like to express my deep appreciation to the Chief Technical Adviser, Mr. Albert M. Marckwardt, for his invaluable contribution in the design of the survey questionnaire, in the field staff training, in the analysis of the survey results, and in the writing of chapters of this report. I would also like to express my gratitude to Mr. Nuri Ozsever and Mr. Marian Zalcman who assisted us in producing output tables through training of some NSO programmers in the use of ISSA software. I would say that the skills of Mr. Marckwardt and Mr. Ozsever were transmitted to the national staff. Special thanks are due to Ms. Linda Demers, Mr. B. Batmunkh, Dr. E. Davaadorj and Dr. D. Wohlfahrt for their valuable reviewing of all chapters of the report.

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Introduction

The 1998 Mongolian Reproductive Health Survey (RHS) is a nationally representative sample of 6003 households, in which 7461 women of reproductive age (15-49 years) were interviewed, as well as a subsample of 1557 husbands. Fieldwork was conducted from October to December 1998. The RHS was carried out by the National Statistical Office (NSO) of Mongolia, with funding from the United Nations Population Fund (UNFPA). Technical assistance was provided by the United Nations Statistics Division and the UNFPA Country Support Team in Bangkok.

The purpose of the RHS was to gather information on fertility, infant and child mortality, family planning, and maternal and child health to help in the execution and evaluation of the National Reproductive Health Program, which is carried out principally by the Ministry of Health and Social Welfare (MOHSW) with support from UNFPA. The information in this report is presented at the national level, and broken down by population groups defined by urban-rural residence, region, age and level of education, among others. A further objective was to instill in the NSO the capacity to carry out large-scale, nationally representative and internationally comparable scientific surveys. It is expected that the survey will provide policy makers, health officials and researchers with data essential for informed policy-making, program execution, and further research.

Fertility

The survey indicates a total fertility rate (TFR) of 3,1 children per woman for the past 3 years in Mongolia. This figure is much greater than that derived from registered births, and will be the subject for further research. Fertility levels differ for various population groups, varying, for instance, from 2,5 for urban areas to 3,7 for rural areas. In Ulaanbaatar, the capital, the TFR is 2,2 children per woman, while in West Region it is 3,9.

Fertility has declined sharply in the recent past. The declining trend can be seen by comparing the completed family size of women near the end of their childbearing years with the current TFR. Completed family size among women 40-49 is 5,1 children, two children greater than the current TFR of 3,1.

Most women desire to limit their family size. Among women with 2 living children, 58 percent say they want no more, and among those with 3 living children, 80 percent want no more. Women are fairly successful at planning their families. Among births in the 3 years preceding the survey, 85 percent were wanted when they occurred, 11 percent were the result of unwanted pregnancies, and 4 percent would have been desired at a later time. If unwanted births could be avoided, the TFR would fall from 3,1 to 2,7.

Family Planning

Knowledge of contraceptive methods is virtually universal among Mongolian women (99 percent of currently married women). Over 84 percent of married women have used contraception, and 60 percent were currently using at the time of the survey. Nearly 46 percent of married women were using a modern method of contraception, while 14 percent were using traditional or other methods. The IUD is by far the most commonly used method (32 percent), followed by periodic abstinence (nearly 13 percent). Other modern methods of contraception account for small amounts of use among currently married women: pills and condoms (about 4 percent each), injections (3 percent), and female sterilization (slightly over 2 percent).

The level of use of contraception varies among population groups. It is highest among women in urban areas and among women who have completed secondary education, and is lowest among women in West and South regions. Most users of modern methods of contraception obtain their supplies through the public sector (76 percent). But it is important to note that 43 percent of pill users purchase their supply from pharmacies, and 59 percent of condom users obtain them from pharmacies or other shops.

The high contraceptive prevalence has undoubtedly affected fertility levels. It is no coincidence that where the use of contraception is highest, i.e. in urban areas and among women who have completed secondary education, fertility is lowest. It seems likely that the use of contraception will continue to grow in the future. Among 76 percent of married couples, both spouses say they approve of family planning; and among married women who are not now using a contraceptive, over one-half intend to use in the future.

Other Factors Affecting Fertility

The median age at marriage for women is 20,8 years; there has not been much variation in age at marriage over the past 20 years. Women in West region get married about a year later than women in other regions, and women with more than secondary education marry almost 2 years later than those with primary education or less.

Breastfeeding is still almost universal in Mongolia: over 96 percent of children born in the 3 years before the survey were breastfed. The duration of breastfeeding is unusually long by world standards. The median duration of breastfeeding is 25 months, and one-fifth of children still receive breastmilk at 34-35 months of age. This has an impact on the duration of postpartum amenorrhea (the period during which a woman cannot conceive again after the birth of a child, because her menstrual periods have not resumed). The median duration of postpartum amenorrhea is 8 months. This in turn helps to explain the relatively lengthy inter-birth intervals, with a median of 35 months, which are a reflection of the current low level of fertility.

Abortion also plays a role in depressing fertility. Abortion is legal in Mongolia, although it is discouraged as a method of controlling fertility. Among women of childbearing age, almost one-fifth (19 percent) have at some time had an unwanted pregnancy, and 64 percent of the most recent unwanted pregnancies were aborted. It is estimated that currently one-sixth of pregnancies are aborted. Most abortions (95 percent)

are performed by doctors.

Infant and Child Mortality

The level of infant mortality stood at 65 per thousand live births in the five-year period preceding the survey, and that of under-five mortality at 81 per thousand. These figures are substantially higher than registered deaths, and will be a topic for further investigation. There has been a notable decrease in mortality over time. Comparing the period 0-4 years prior to the survey with the period 10-14 years prior, infant mortality declined by 22 percent, and under-five mortality by 35 percent. Mortality is much higher in rural areas than in urban areas, and varies inversely with the mother's level of education. Mortality is lowest for children born to women between the ages of 20 and 34 years, those of birth order less than 4, and those born 4 or more years after the preceding sibling.

Maternal and Child Health

The primary health-care system in Mongolia appears to be functioning fairly well, despite recent cutbacks in funding. Among births in the past 5 years, 90 percent received antenatal care from health professionals, and 94 percent of births occurred in a hospital or clinic, and were attended by health personnel. Perhaps the area in which the health-care system is weakest is in combating anemia. Less than half of women received iron pills during their most recent pregnancy, and only 7 percent took the pills for the recommended 3 months.

Mongolian children appear to be healthy, from an international perspective. Despite the fact that the survey was carried out in freezing weather, late autumn and early winter, only 11 percent of children under the age of 5 years suffered acute respiratory infections (ARI) in the two weeks prior to the survey, and only 9 percent had a bout of diarrhea. Mothers make good use of health care facilities for their children: 77 percent of children with ARI and 67 percent of children with diarrhea were taken to a health facility for consultation and/or treatment.

Knowledge of AIDS

A great majority of adults in Mongolia have heard of AIDS, including 96 percent of women of reproductive age. Most women know how to avoid AIDS, the most common responses being to restrict sex to one partner and/or use condoms during sexual intercourse. However, concerning the risks of AIDS, many women have faulty knowledge: one-third stated that a healthy-looking person cannot have AIDS, and only slightly more than half thought that AIDS is almost always fatal. Only a small fraction of women (3 percent) have changed their behavior for fear of AIDS. Much publicity by health authorities remains to be undertaken if AIDS is not to become a serious problem in Mongolia, as elsewhere.

CHAPTER I

INTRODUCTION

Amarbal Avirmed and Albert M. Marckwardt

Geography, Weather and History

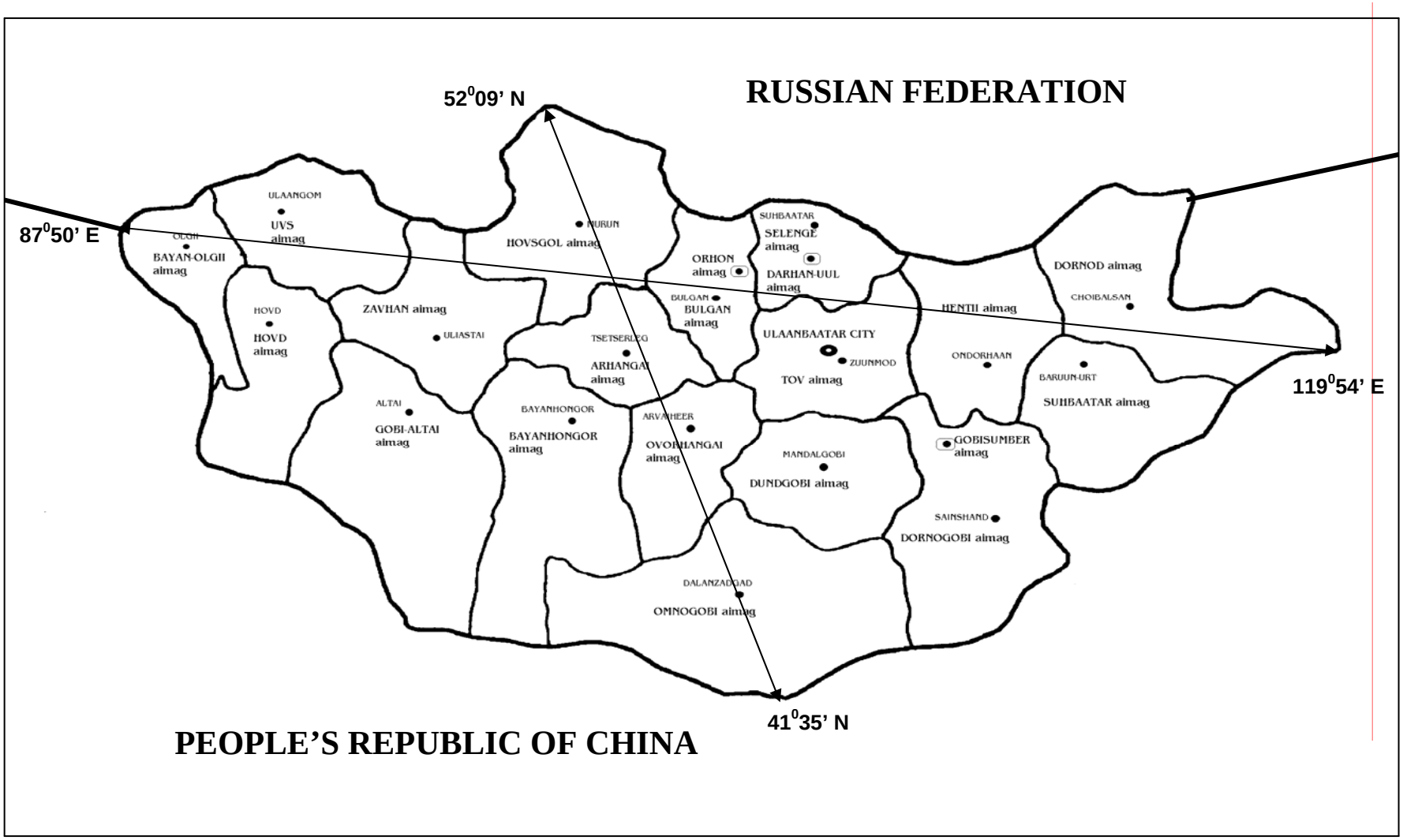
Mongolia is situated in the center of Asia, between the Russian Federation to the north and the People's Republic of China to the east, south and west. Mongolia is a landlocked country of 1 566 460 square kilometers. The country consists of several distinctive geographic zones. The western and northern parts of the country are located in mountainous and forested zones, the eastern part in steppe zones, and the southern part in the Gobi Desert. Mongolia has an extreme continental dry climate and four seasons (summer from June to August, autumn from September to November, winter from December to February, and spring from March to May). The winter is extremely cold, with temperatures falling to minus 40 degrees centigrade, and the cold weather lasts longer than the nominal seasons indicated in the sentence above.

Administratively, the country is divided into 21 aimags (provinces) and the capital city Ulaanbaatar. Further, aimags are divided into 336 soums. Soums are divided into bags. There are approximately 1700 bags and horoos; the bag is the lowest administrative unit in the aimags and the horoo is the lowest unit in Ulaanbaatar (Figure 1.1).

According to history, various states have existed for over 2000 years in what today is the territory of Mongolia. In 1206, Genghis Khan formed a unified Mongolian state. Thereafter Genghis Khan occupied many Asian and European countries, marking the start of the Mongolian Empire. The Mongolian Empire played an important role in world history during the 12^{th} to 14^{th} centuries. But internal strife took over starting in the middle of the 14^{th} century, and the Empire collapsed. In 1691, Mongolia lost its sovereignty and became part of Manchu. The Manchu domination continued for more than 200 years. In 1911, Mongolia was established as an autonomous country as a result of a national freedom movement. However, the situation of the government was not stable until 1921, and in 1924 Mongolia proclaimed its socialist way of development. Finally, since 1989 Mongolia has been in transition from a centrally planned economy to a market economy.

Around 95 percent of the population is Mongolian. There are Kazakhs and a Turkish-speaking population who live in the western part of the country. There are also a small number of ethnic Chinese, most of whom live in Ulaanbaatar. The official language of Mongolia is Mongolian, which has its unique alphabet, but the Cyrillic alphabet is used in official documents, books, newspapers and magazines. Most Mongolians speak Russian, but English is slowly taking over as the international medium of communication.

Figure 1.1 Administrative Units of Mongolia



With respect to religion, Buddhism is the predominant religion. But it must be mentioned that in the last few years, other religions have been coming to Mongolia. Also, Kazakh populations who live in the west of the country practice the Muslim religion.

Population Growth

According to historians, the Mongolian population was not increasing but decreasing for 300 years up to the beginning of this century. As a result of the national freedom movements at the beginning of the 20th century, and the 1911 and the 1921 revolutions, the Mongolian people experienced historical change and found the way to prosperity as a nation. However, population growth was slow until 1950. One of the reasons was the economic instability of the country from the 1911 revolution until the end of World War II. The total population of Mongolia was 647 500 in 1918. In the following ten years it increased by 100 000. In 1930 the population growth rate was 1 percent. The crude death rate (CDR) was higher than the crude birth rate (CBR) in the years 1936, 1937 and 1939. The effect of international migration on the population growth has never been significant.

Table 1.01 Some Selected Indicators of the Mongolian Population

Indicators	1969	1979	1989	1998
Total Population (* 1000)	1,197	1,595	2,044	2,413
Male (%)	49,9	50,1	49,9	49,6
Female (%)	50,1	49,9	50,1	50,4
Aged 0 – 4 (%)	16,6	16,5	15,9	10,1
Aged 5 – 14 (%)	27,8	27,7	26,0	25,5
Aged 15 – 64 (%)	49,6	50,8	54,1	60,5
Aged 65 + (%)	6,0	5,0	4,0	3,9
Female Aged 15 - 49 (%)	19,3	21,2	23,5	27,1
Sex Ratio (%)	99,5	100,3	99,7	98,6
Age Dependency Ratio (%)	101,6	96,9	84,8	65,3
Population Growth Rate (%)	2,8 [1960-1970]	2,9 [1970-1980]	2,5 [1980-1990]	2,0 [1990-1998]

After 1940 the living standard of the population started to improve significantly as a result of economic reforms and political stability. At the same time, a modern medical service system was introduced and developed in the country. Due to these changes, fertility began to increase and mortality to decrease, and consequently the population grew at a very fast rate. During 1950-1990 the population of the country increased three fold. However, since the mid-1970s fertility has started to decline slowly. (See Table 1.01.)

Since 1980, the average annual population growth rate has started to decrease. For example, the average annual growth rate was 2,8 percent during 1960-1970, 2,9 percent during 1970-1980, 2,5 percent during 1980-1990, and it further decreased to 2,0 percent during 1990-1998. The main determinant of the decrease in the growth rate of the population was declining fertility. In 1990, there were 35,3 births per 1000 population; this declined to 20,6 in 1998. Mortality has also evolved over the past 30 years. The crude death rate, or deaths per 1000 population, decreased significantly from 12,3 in 1970 to 8,5 in 1990, and to 6,6 in 1998. Hence, both fertility and mortality are declining. Due to the decline in mortality, life expectancy of the Mongolian population increased greatly. Over the last 30 years, life expectancy increased by approximately 7,4 years, and currently it is 62,5 years for males and 64,1 years for females.

The population of Mongolia stood at 2 413 000 at the end of 1998. It increased by 33 thousand persons, or 1,4 percent compared with 1997. The male population comprises 49,6 percent of the total, while the female population comprises 50,4 percent. The population is relatively young and the share of the population in the economically active years is high. The large cohorts resulting from high fertility after World War II and up to the mid-1970s form a large part of the economically active population.

Population Distribution and Migration

Mongolia is a country with a sparse population compared to most countries in the world. Between 1918 and 1998, the population of Mongolia increased from 647,5 thousand to 2413 thousand, or by four times. Similarly, population density increased from 0,35 to 1,54 persons per square kilometer. When population density is compared across aimags and soums, it is clear that there are great differences across the territory of the country. In rural areas there are only 0,6 persons per square kilometer.

Until recently, internal migration was controlled by a citizen passport system. This has been relaxed. To meet the demand for labor of the growing industrial sector in urban areas, the rural-urban migration stream has grown. Since 1989, it is estimated that 30 percent of the persons then located in rural areas and small urban areas have migrated to Ulaanbaatar city, Darhan-Uul and Orhon aimags.

Population Policy

Mongolia aims to establish a humanitarian and democratic society. The main objectives of its population policy are to increase the population size of the country, to bring up high-quality children, and to provide favorable socio-economic and environmental conditions for every aspect of human development. The document, “Population Policy of Mongolia”, emitted in 1996, has 8 chapters and 105 paragraphs. The chapters of the population policy are:

1. Population Growth and Health
2. Food and Housing
3. Education and Employment
4. Distribution and Migration of Population
5. Population Information, Registration and Research

6. Sustainable Development of Population
7. Family and Status of Social Groups
8. Administration of Population Policy and Resources

From a demographic standpoint, the chief objectives of the Population Policy of Mongolia are to increase population size by maintaining an average annual growth rate of 1.8 percent to the years 2010-2015; to reduce infant and child mortality by one third and maternal mortality by 50 percent; and to increase life expectancy at birth. The government of Mongolia is implementing a number of national health programs, including the Reproductive Health Program, under whose auspices the Reproductive Health Survey has been implemented.

Reproductive Health Survey

The Reproductive Health Survey (RHS) was conducted for the first time in Mongolia in 1998 by the National Statistical Office (NSO) of Mongolia, with financial support from the United Nations Population Fund (UNFPA). Activities such as development of the sample design, development of questionnaires, data gathering, data analysis and report writing were achieved through the cooperative efforts of the staff of the Population and Survey Department of the NSO and the Technical Adviser for the UNFPA-funded project MON/97/P04. Similarly, the UNFPA Country Support Team in Bangkok provided support and advice on data entry, processing and the development of output tables. It is expected that the survey will be repeated periodically in the future.

The RHS has the following objectives:

1. Gather information on fertility, mortality and family planning at the national level;
2. Determine fertility, knowledge of contraceptives, and level of contraceptive use by region and rural-urban residence, age, educational level, and other background characteristics of women;
3. Gather information on specific health issues such as child health, breastfeeding practices, prenatal care, difficulties and complications during pregnancy, and abortion;
4. Disseminate Mongolian data on reproduction, health and family planning both within the country and internationally;
5. Provide policy makers and researchers with data essential for informed policy-making and further research.

Sampling for the RHS

The survey was conducted using a two-stage sampling method, with equal probability of selection of households. The sample frame comprised the listings of households prepared annually in bags and horoos across the country. It was determined from experience of other countries that 25 households per cluster would provide an optimum representation in a country where no such survey has ever before been conducted. (The best cluster “take” depends upon the intra-cluster versus inter-cluster heterogeneity of the principal variables being measured; this can only be determined after carrying out a survey.) For the survey it was planned to select 6000 households, which is a 1,13 percent sample of all households in the country. This implied the selection of 240 clusters of households. Bags and horoos were the primary sampling

units (PSUs). All 1684 PSUs were stratified implicitly by aimag and soum, and the selection of the 240 sample PSUs (or clusters) was done systematically with a random start, with probability proportional to the number of registered households. Households were then selected systematically with a random start within each PSU, using an interval directly proportional to the number of households in the PSU. Each registered household in Mongolia had an equal and known probability of being selected in the RHS sample. The selected households were interviewed using the household schedule. All women between the ages of 15 and 49, inclusive, who slept in the household's dwelling the night prior to interview were eligible to be interviewed using the women's interview schedule. Interviewing teams were also instructed to interview 6 husbands of interviewed women in each PSU.

Table 1.02 Distribution of the RHS Household Sampling by Aimag, Mongolia 1998

	Aimag	Clusters	Number of Households
1	Arhangai	1-12	300
2	Bayan-Olgii	13-20	200
3	Bayanhongor	21-30	250
4	Bulgan	31-37	175
5	Gobi-Altai	38-44	175
6	Dornogobi	45-49	125
7	Dornod	50-57	200
8	Dundgobi	58-63	150
9	Zavhan	64-73	250
10	Selenge	74-83	250
11	Suhbaatar	84-89	150
12	Uvs	90-99	249
13	Tov	100-110	275
14	Ovorhangai	111-124	350
15	Omnogobi	125-129	125
16	Hovd	130-137	200
17	Hovsgol	138-150	325
18	Hentii	151-158	200
19	Darhan-Uul	159-168	250
20	Orhon	169-174	149
21	Gobisumber	175-176	50
22	Ulaanbaatar	177-240	1607
	Total		6005

Questionnaires

There were three questionnaires used in the RHS. For the development of the woman's questionnaire, the model 'B' of the Demographic and Health Surveys program (phase III) served as a base, though many changes were made reflecting Mongolia's specific needs. The contents of the three questionnaires are outlined briefly below. (See Appendix D for the questionnaires.)

1. Household Questionnaire:

The household questionnaire consists of questions on relationship to the household head, age, sex, educational level and marital status. The questions in the household questionnaire were asked concerning all members of the household, as well as visitors who spent the night before the survey in the household. The household questionnaire was developed in order to obtain general demographic information, information on household amenities and housing conditions, and as a tool for selecting women and husbands for individual interview.

2. Woman's Questionnaire:
   - Background questions
   - Reproduction
   - Maternal health, pregnancy, breastfeeding, and child health
   - Knowledge and use of contraceptive methods
   - Marriage
   - Fertility preferences and abortion
   - Employment, and questions concerning the husband
   - Knowledge about AIDS

3. Husband's Questionnaire:
   - Background questions
   - Reproduction
   - Knowledge and use of contraceptive methods
   - Knowledge about AIDS

Schedule of Survey Activities of the RHS

The preparatory activities for conducting RHS were initiated in 1998 and the data collection activities were planned to be carried out the same year. It should be noted that all plans were actually implemented in the time frame indicated in the table below, which, from an international standpoint, is a remarkable achievement.

Table 1.03 General Plan for Conducting the RHS

Planned Activities	Started	Ended
1. Preparatory activities for the survey	01.12.97	01.09.98
2. Pilot survey	15.07.98	15.08.98
3. Data collection (field work)	04.10.98	31.12.98
4. Data entry and processing	20.10.98	31.01.99
5. Development and programming of output tables	01.12.98	01.02.99
6. Running and Printing of output tables	01.02.99	15.03.99
7. Production of main report	15.03.99	01.08.99

Pilot Surveys

First versions of the survey questionnaires were modified based on the comments and suggestions provided by other organizations and Ministries, and were finalized with the approval of the RHS Steering Committee. Then two pilot surveys were conducted, one in Arhangai province covering 100 households (160 women aged 15-49, 20 husbands) and the other in Ulaanbaatar covering 50 households (60

women aged 15-49, 20 husbands) from mid-July to mid-August, 1998. The main purposes of conducting the pilot surveys were to test the suitability of the questions included in the questionnaires, the understanding of the questions by respondents, to test the reliability of listings of households at the bag and horoo level, to estimate the cost of fieldwork activities, and to test programming for data processing. All the above mentioned objectives were fully met by the pilot surveys, and the questionnaires were revised and finalized.

Data Collection

From 14 September to 1 October 1998, training was held for interviewers. Data collection activities started with the appointment of 10 teams with 7 members in each. Each team consisted of 4 female interviewers, a male interviewer, an editor and a supervisor. When the data collection activities started winter was very near, therefore, it was planned to first cover the mountainous west and forested regions of the country, then Gobi and central regions, lastly Ulaanbaatar city. Data collection started on 4 October and terminated 31 December 1998.

Editors were appointed for each team, so that editors and supervisors were able to edit questionnaires daily and correct them by going back to the households when necessary. This way of organizing fieldwork ensured high quality and reliable information. Data collection progress was reported weekly to the survey headquarters at the NSO. In addition to team supervisors and editors, the survey employed two roving monitors to assure that the same criteria were being applied by all interview teams. It is also worth mentioning that a number of persons from bags or horoos (around 300 persons) were also involved and provided great assistance during the fieldwork operation.

Data Processing

The computer data entry work was initiated on 20 October 1998 and terminated 1 February 1999. The editing of the computer files finished by the middle of February. The computer software package “Integrated System for Survey Analysis” (ISSA), created and distributed by Macro International, Inc. was used for data entry and data processing. From February 1999, output tables started to be produced, and this activity lasted for two months. Activities such as data entry, quality control and production of output tables were accomplished by the national staff under the supervision of the UN Technical Adviser and an adviser from the UNFPA Country Support Team in Bangkok. Similarly, the main report of RHS has been prepared through the cooperative work of national staff with the Technical Adviser. The tabulation plan follows closely the recommendations contained in *Guidelines for the DHS-III Main Survey Report*, published by Macro International.

Coverage of the Survey

In the RHS, 6005 households were selected and 6003 households were actually interviewed; 7553 women aged 15-49 were selected for individual interview and 7461 women were interviewed; and 1560 husbands were selected and 1557 husbands were interviewed. This shows that the survey coverage was remarkably good. It is possible that the survey response rate was enhanced due to the extreme

immobility of the population during the cold season. However, there were also risks involved in carrying out fieldwork during winter. These included the extremely cold weather with danger of frostbite, very short days and long nights, snowy and icy roads, etc. Luckily, there were no reported accidents or injuries to fieldwork staff.

Table 1.04 Results of the Household and Individual Interviews (Women and Husbands), Mongolia 1998

	Residence		
	Urban	Rural	**Total**
Number of Dwellings Sampled	2931	3074	6005
Number of Households Interviewed	2930	3073	6003
Household Response Rate	**100.0**	**100.0**	**100.0**
Number of Eligible Women	3943	3610	7553
Number of Eligible Women Interviewed	3904	3557	7461
Eligible Woman Response Rate	**99.0**	**98.5**	**98.8**
Number of Husbands Selected	794	766	1560
Number of Husbands Interviewed	793	764	1557
Husband Response Rate	**99.9**	**99.7**	**99.8**

Plans for Further Analysis

It is envisioned that further analyses of the RHS will either be undertaken directly by staff of the NSO, or commissioned to analysts in other organizations. Some of the topics to be investigated include a comparison of husbands and wives with respect to contraceptive behavior and fertility preferences; the reasons for the substantial discrepancies between fertility and infant mortality rates calculated from the survey and those calculated from registration data; fertility differentials; and recent trends and differentials in the use of maternal and child health care facilities.

CHAPTER II

HOUSEHOLD AND RESPONDENT CHARACTERISTICS

Amarbal Avirmed and Albert M. Marckwardt

The household questionnaire is one of the important parts of the Reproductive Health Survey (RHS). Information on the age and sex of household members, educational level, marital status and housing conditions was collected using the household questionnaire. In addition to these, this chapter presents information on women's access to mass media, past and current employment, and decisions on use of earnings. This information was collected using the women's questionnaire. This chapter has two purposes: 1) to lay out a descriptive assessment of the environment in which people live; and 2) to provide a brief description of women of reproductive age in Mongolia. This will give a background to the chapters which follow on fertility, nuptiality, contraceptive behavior, maternal and child health, etc.

Age-Sex Composition of the Population

The age and sex composition of a population reflects past fertility and mortality levels, as well as migration patterns, and may also anticipate their future course. Table 2.01 presents the percent distribution of the de-facto population found in households. The de-facto population is defined as persons who slept in the dwelling the night prior to the household interview. These were the people who were eligible for the individual interview (both women and husbands). Throughout this report, the focus will be on the de-facto population. A population pyramid is the best way to present the age and sex composition of the population. When we look at the pyramid it can be seen that the population is relatively young (Figure 2.1). Another important thing which the pyramid shows is change in the fertility level in the last several years. The percentage of population aged 0-4 compared to the percentage of age 5-9 decreased by 2,6 points in urban areas while it increased by 0,6 points in rural areas. The overall decrease is 1,0 percent, from 14,2 percent to 13,2 percent. It can be concluded that the decrease in fertility is greater in urban areas than in rural areas.

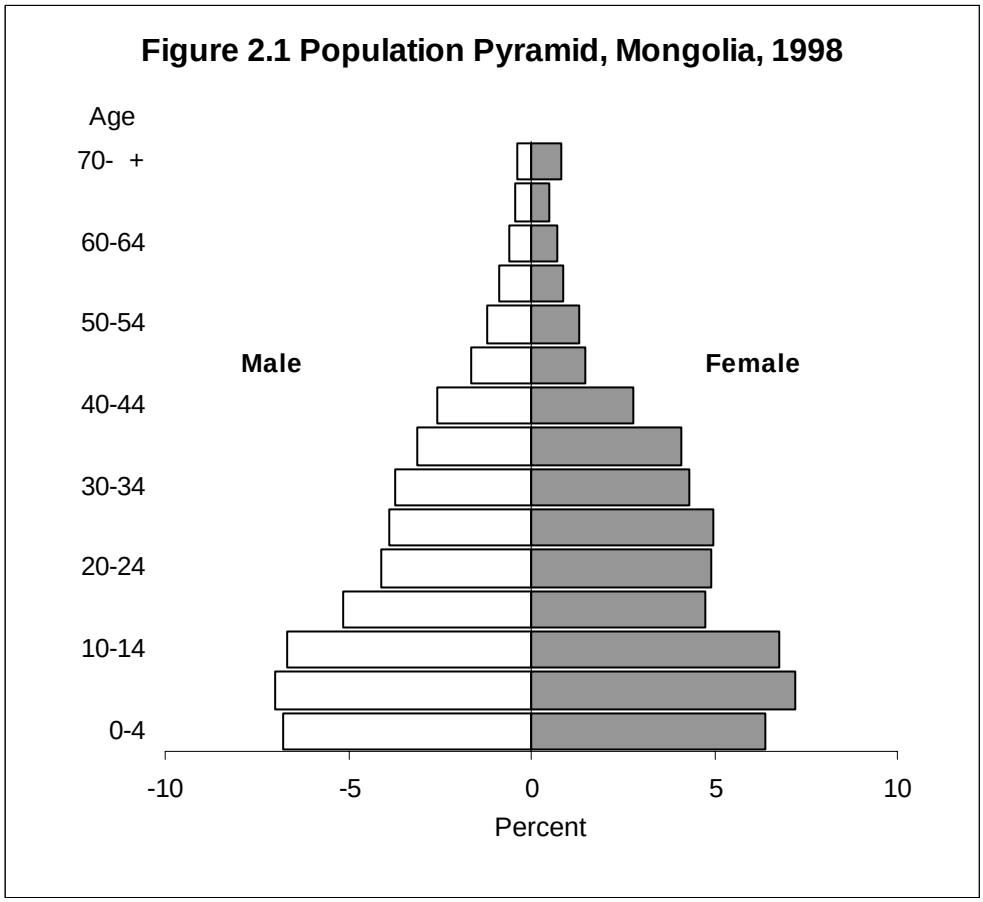
The dependency ratio and the median age of the population are important indicators that are calculated from the age composition of the population. The dependency ratio is the quotient of the number of youths under 15 and the number of persons 65 and over divided by the number of adults aged 15 to 64 (the economically active ages), times 100. Table 2.02 shows that the dependency ratio has fallen from 102 to 75 over the course of the past 30 years. The principal cause of this is the decline in fertility, and the implication is that people in the economically active ages now need to feed fewer mouths than before. Falling fertility rates are also reflected in the median age of the population, which since 1979 has risen from 17,5 years to 19,5 years.

Table 2.01 Percentage Distribution of the Household Population by Five-Year Age Groups, According to Sex and Urban-Rural Residence, Mongolia 1998

Household	Urban			Rural			Total		
Member Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	11,5	9,5	10,5	16,6	15,3	15,9	14,1	12,4	13,2
5-9	13,8	12,4	13,1	15,2	15,3	15,3	14,5	13,9	14,2
10-14	14,7	13,9	14,3	13,1	12,3	12,7	13,8	13,1	13,4
15-19	11,0	10,1	10,5	10,2	8,2	9,2	10,6	9,2	9,9
20-24	8,8	9,5	9,2	8,2	9,4	8,8	8,5	9,5	9,0
25-29	7,7	8,8	8,2	8,5	10,3	9,4	8,1	9,6	8,9
30-34	7,7	8,6	8,2	7,7	7,9	7,8	7,7	8,3	8,0
35-39	6,8	8,6	7,7	6,2	7,1	6,7	6,5	7,9	7,2
40-44	5,7	6,2	5,9	5,0	4,7	4,9	5,3	5,4	5,4
45-49	4,2	3,6	3,9	2,6	2,3	2,4	3,4	2,9	3,1
50-54	3,0	3,2	3,1	2,0	1,9	1,9	2,5	2,5	2,5
55-59	2,1	1,7	1,9	1,6	1,7	1,7	1,8	1,7	1,8
60-64	1,1	1,4	1,3	1,3	1,3	1,3	1,2	1,4	1,3
65-69	0,8	1,0	0,9	0,9	0,7	0,8	0,9	0,9	0,9
70-74	0,6	0,8	0,7	0,4	0,5	0,5	0,5	0,7	0,6
75-79	0,4	0,4	0,4	0,2	0,4	0,3	0,3	0,4	0,4
80 +	0,3	0,3	0,3	0,2	0,5	0,4	0,2	0,4	0,3
Total	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100.0**	**100.0**	**100.0**
Number	6521	7118	13639	6846	7222	14068	13367	14340	27707

Table 2.02 Percentage Distribution of the Population by Age Group at Different Dates, Mongolia 1998

Background Characteristics	Census			Survey
	1969	1979	1989	1998
Age Group				
Less than 15	44,4	44,2	41,9	40,9
15-64	49,6	50,8	54,1	57,0
65 +	6,0	5,0	4,0	2,1
Total	**100,0**	**100,0**	**100,0**	**100,0**
Median Age	18,6	17,5	18,4	19,5
Dependency Ratio	101,6	96,9	84,8	75,4



Household Composition

For purposes of the RHS, a household is defined as a group of people who live in the same dwelling unit and have common income and expenditure; the relationship of members is not important for the concept of household. The survey excluded people living in institutions such as hotels, school dormitories, military barracks, hospitals, prisons, etc. Table 2.03 shows the percentage distribution of households by sex of head, size and by residence. The percentage of female-headed households is higher in urban areas, 14 percent, than rural, 8 percent. In both urban and rural areas, over 70 percent of households have 5 or fewer members, with a mean of 4,7 members in a household in both areas.

Table 2.03 Percentage Distribution of Households by Sex of Head and Size According to Urban-Rural Residence, Mongolia 1998

Background Characteristics	Residence		
	Urban	Rural	Total
Sex of Head of Household			
Male	86,0	92,3	89,2
Female	14,0	7,7	10,8
Total	**100,0**	**100,0**	**100,0**
Household Members			
1	0,7	0,4	0,5
2	5,4	5,6	5,5
3	18,0	16,9	17,4
4	28,0	28,2	28,1
5	21,4	21,6	21,5
6	13,1	12,8	12,9
7	6,6	7,7	7,2
8	3,4	3,6	3,5
9 +	3,4	3,2	3,3
Total	**100,0**	**100,0**	**100,0**
Mean	4,7	4,7	4,7

Educational Level

From a demographic standpoint, educational level, particularly women's educational level affects a number of variables, including fertility levels, infant and child mortality, morbidity and contraceptive use. Tables 2.04A, 2.04B, and Table 2.05 present the educational level and school attendance of the population by age, sex, residence and region.(See also Figure 2.2.)

According to these tables, the educational level of females is higher than that of males. For example, a little over 42 percent of females have completed secondary school or more, while only 34 percent of males have done so. Similarly, 41 percent of females and 46 percent of males interviewed in the survey have primary education or less. The share of women is higher than men for educational level higher than completed secondary in all age groups between the ages of 20 and 44. At ages over 45, more men than women had an educational level higher than completed secondary, reflecting the relative disadvantage of women many years ago.

Due to the socio-economic changes that have occurred during the last 20 years, the percentage of men with completed secondary education is lower than that of women, and this is true in both urban and rural areas and in all regions.

Table 2.04(A) Percentage Distribution of the Male Household Population Age 6 and Over by Highest Level of Education Attended, According to Selected Background Chracteristics, Mongolia 1998

Background Characteristics	Level of Education						
	Primary or Less	Incomplete Secondary	Complete Secondary	More than Secondary	DK/ Missing	Total	Number
Household Member Age							
6-9	100,0	0,0	0,0	0,0	0,0	100,0	1 591
10-14	97,8	2,1	0,0	0,0	0,1	100,0	1 850
15-19	38,6	39,5	20,0	1,8	0,1	100,0	1 418
20-24	15,5	38,3	33,1	13,2	0,0	100,0	1 137
25-29	5,9	28,3	31,9	33,9	0,0	100,0	1 083
30-34	7,3	27,4	23,4	41,9	0,0	100,0	1 031
35-39	12,7	26,9	18,2	42,2	0,0	100,0	869
40-44	19,6	27,7	12,2	40,6	0,0	100,0	715
45-49	22,2	17,5	14,0	46,3	0,0	100,0	451
50-54	29,0	15,0	13,8	42,2	0,0	100,0	334
55-59	40,4	12,7	7,3	39,6	0,0	100,0	245
60-64	52,5	17,5	5,6	24,4	0,0	100,0	160
65 +	68,4	4,4	1,2	25,6	0,4	100,0	250
Residence							
Urban	37,2	16,6	19,9	26,3	0,1	100,0	5 625
Rural	53,9	24,0	9,3	12,7	0,0	100,0	5 509
Region							
Central	49,4	23,6	11,4	15,6	0,0	100,0	4 018
East	53,8	22,7	11,0	12,5	0,0	100,0	1 054
West	50,5	20,5	10,8	18,1	0,0	100,0	2 414
South	54,9	23,3	11,1	10,7	0,0	100,0	523
Ulaanbaatar	32,3	14,3	23,6	29,8	0,1	100,0	3 125
Total	**45,5**	**20,2**	**14,6**	**19,6**	**0,0**	**100,0**	**11 134**

Table 2.04(B) Percentage Distribution of the Female Household Population Age 6 and Over by Highest Level of Education Attended, According to Selected Background Chracteristics, Mongolia 1998

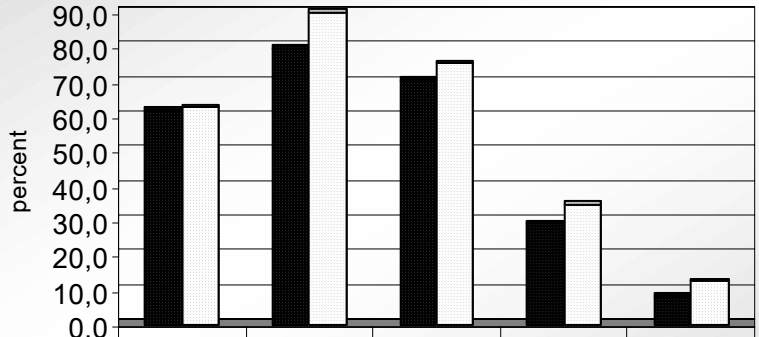
Background Characteristics	Level of Education						
	Primary or less	Incomplete Secondary	Complete Secondary	More than Secondary	DK/ Missing	Total	Number
Household Member Age							
6-9	100,0	0,0	0,0	0,0	0,0	100,0	1 653
10-14	97,0	3,0	0,0	0,0	0,0	100,0	1 875
15-19	23,7	41,6	32,9	1,7	0,0	100,0	1 315
20-24	6,8	29,9	43,0	20,3	0,0	100,0	1 358
25-29	3,3	18,1	33,5	45,1	0,0	100,0	1 371
30-34	4,6	17,6	29,9	47,8	0,0	100,0	1 186
35-39	10,5	18,1	21,4	50,0	0,0	100,0	1 126
40-44	16,9	21,3	12,2	49,6	0,0	100,0	779
45-49	24,2	16,3	14,6	45,0	0,0	100,0	418
50-54	33,4	16,9	14,9	34,8	0,0	100,0	362
55-59	55,4	13,2	4,5	26,9	0,0	100,0	242
60-64	70,4	11,2	4,1	14,3	0,0	100,0	196
65 +	85,8	4,2	1,5	7,7	0,9	100,0	337
Residence							
Urban	34,3	12,4	22,4	30,8	0,0	100,0	6 315
Rural	48,2	21,1	15,1	15,6	0,0	100,0	5 903
Region							
Central	43,2	19,5	17,9	19,4	0,0	100,0	4 386
East	47,0	18,1	14,2	20,6	0,1	100,0	1 164
West	47,3	18,5	14,3	19,9	0,0	100,0	2 626
South	46,2	21,2	15,7	16,9	0,0	100,0	586
Ulaanbaatar	30,5	10,3	25,8	33,4	0,0	100,0	3 456
Total	**41,0**	**16,6**	**18,9**	**23,5**	**0,0**	**100,0**	**12 218**

Table 2.05 Percentage of Household Population 6-24 Years of Age Attending School by Age, Sex and Residence, Mongolia 1998

Age Group	Male			Female			Total		
	Residence			Residence			Residence		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	70,5	53,3	61,6	68,0	57,8	62,6	69,3	55,6	62,1
11-15	92,2	66,7	79,6	96,5	82,2	89,9	94,4	74,1	84,7
6-15	**81,2**	**59,6**	**70,3**	**82,3**	**68,3**	**75,3**	**81,7**	**64,0**	**72,8**
16-20	48,2	9,1	29,2	55,1	11,1	34,6	51,7	10,1	31,9
21-24	13,9	2,1	8,0	23,9	1,3	12,5	19,3	1,7	10,5

Table 2.05 and Figure 2.2 present the status of school attendance of the population aged 6-24 years. For the population in the age group of primary education, or aged 6-10 years, there is no difference by sex, but attendance in urban areas (69 percent) is higher than in rural areas (56 percent). However, the percentage of girls attending school at ages 11-15 years is higher than that of boys by 10 points (90 percent versus 80 percent). In 1998, one of every 10 people aged 21-24 is attending school, and this indicator is very much higher in urban areas, almost 1 in 5. This is directly related to the concentration of institutions of higher learning in urban areas. But what is once again of concern is the notably lower attendance percentages for males than for females at ages 11 years and over.

Figure 2.2 Percentage of Houshold Population 6-24 Years of Age Attending School by Age and Sex, Mongolia 1998



	6-10	11-15	6-15	16-20	21-24
■ Male	61,6	79,6	70,3	29,2	8,0
□ Female	62,6	89,9	75,3	34,6	12,5

Housing Conditions of Households and Related Characteristics

In the household questionnaire, in addition to collecting demographic information on the population, several questions were included in order to investigate housing conditions of households. These are presented in Table 2.06. The survey results show that 48 percent of households live in traditional dwellings (gers), and slightly more than half live in apartments and houses. About 75 percent of rural households and 21 percent of urban households live in gers, while 42 percent of urban households live in apartments.

Table 2.06 Percentage Distribution of Households by Housing Characteristics, According to Urban-Rural Residence, Mongolia 1998

Background Characteristics	Residence		
	Urban	Rural	Total
Accommodation			
Ger (With 4 or 5 Walls)	17,7	58,2	38,4
Ger (With 6+ Walls)	3,4	16,3	10,0
Private House (1-2 Rooms)	28,4	18,4	23,3
Private House (3+ Rooms)	8,1	3,8	5,9
Apartment (1-2 Rooms)	28,6	2,4	15,2
Apartment (3+ Rooms)	13,8	0,9	7,2
Total	**100,0**	**100,0**	**100,0**
Electricity			
Yes	98,2	38,8	67,7
No	1,8	61,2	32,3
Total	**100,0**	**100,0**	**100,0**
Source of Drinking Water			
Central/Piped	46,5	0,6	23,0
Local	2,1	0,5	1,3
Well	48,2	46,5	47,3
Spring Water/Mineral Spring	2,1	10,9	6,6
River/Snow/Rainwater	1,1	41,5	21,8
Total	**100,0**	**100,0**	**100,0**
Household Income			
Enough	41,7	49,7	45,8
Not Enough	58,2	50,3	54,1
Don't Know	0,1	0,1	0,1
Total	**100,0**	**100,0**	**100,0**
Number	2 930	3 073	6 003

Almost 68 percent of households use electricity. Almost all (98 percent) of the urban households use electricity, while a little over one third of rural households use electricity. Around 97 percent of urban households use central/piped, local, or well water, while 52 percent of rural households get their drinking water from springs, rivers, snow or rainwater, showing great differences in the sources of water by residence.

When asked the question about whether the household income was “enough” or not (with no definition supplied), 46 percent of all households, and 50 percent of rural households reported that their income was enough. On the other hand, 58 percent of urban households reported that their income was insufficient.

Table 2.07 Percentage Distribution of Households by Numbers of Animals Owned According to Type of Animal, Mongolia 1998

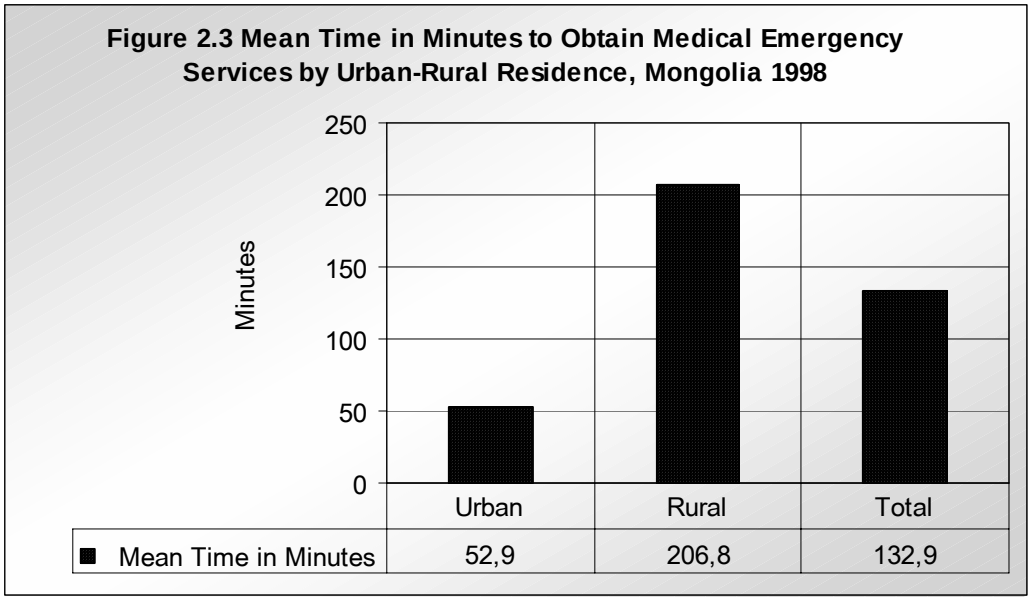
Animals	Households Number	Percent Which Own	Among Those Which Own, Number					Mean (Owners Only)
			1-9	10-49	50-99	100 +	Total	
Camels	6 003	10,6	83,0	14,6	2,2	0,2	100,0	6,4
Horses	6 003	43,8	46,6	49,0	3,7	0,7	100,0	15,0
Cattle/Yaks	6 003	50,4	45,7	51,0	2,8	0,5	100,0	14,4
Sheep	6 003	44,0	14,0	46,7	19,9	19,4	100,0	60,5
Goats	6 003	44,1	17,8	52,6	17,8	11,8	100,0	43,6

Table 2.07 presents the percentage distribution of households by the number of animals owned, by type of animal. About 11 percent of all households own camels, out of which 83 percent own 1-9 camels, while 50 percent of all households own cattle, out of which 51 percent own 10-49 cattle. The most numerous animals are sheep and goats. For each household in Mongolia, there exist 26,6 sheep (44% x 60,5), or approximately 14 million sheep in the country.

Table 2.08 Percentage Distribution of Households According to the Fastest Way to Obtain Medical Emergency Services, and Mean Time in Minutes, Mongolia 1998

Background Characteristics	Residence		
	Urban	Rural	Total
The Fastest Way to Obtain Medical Emergency Services			
Phone	85,6	4,2	43,9
By Car/Motorcycle	0,4	13,7	7,2
By Horse/Camel/Cattle/Yak	0,8	43,5	22,6
Walking	10,2	36,9	23,9
DK/Missing	3,0	1,7	2,3
Total	**100,0**	**100,0**	**100,0**
Number	2 930	3 073	6 003
Number & Mean Time			
Responding Households	2 670	2 891	5 561
Mean Time in Minutes	52,9	206,8	132,9

In order to investigate medical service availability, questions about ways and time to obtain medical emergency services were included in the questionnaire. There is a great difference in the availability of medical services by residence. This can be seen from Table 2.08. Almost 86 percent of urban households call medical emergency services by telephone, while 94 percent of rural households obtain medical emergency services by car, motorcycle, riding or walking. The average time of obtaining medical emergency services is less than one hour in urban areas, and more than three hours in rural areas. (Table 2.08 and Figure 2.3.)



Respondent Characteristics

Table 2.09 presents the percentage distribution of women respondents by age, marital status, urban-rural residence, region, level of education and school attendance. Out of the 7461 women interviewed in the survey, 27 percent were never married, 60 percent were married, 6 percent were living together, and 8 percent were widowed, divorced or separated (i.e. formerly married).

Due to the diversity of density and residence of the population, the number of women selected in the survey was very different for different regions. Between 21 and 35 percent of women live in each of West and Central regions and Ulaanbaatar city, while only 9 percent live in East region and 6 percent in South region. The question related to current attendance of school was asked of women aged 15-24; about 11 percent of women of childbearing age were currently attending school. Almost 35 percent of all women have been educated beyond the secondary level, while 11 percent have primary education or less. This shows that, in general, Mongolian women are well educated. About 33 percent of all women reported that they were atheist, while most of the women, or 62 percent, reported that they were Buddhist. This confirms that Buddhism is the most common religion in Mongolia.

Table 2.09 Percentage Distribution of Women Respondents by Age, Marital Status, Urban-Rural Residence, Region, Level of Education, School Attendance and Religion, Mongolia 1998

Background Characteristics	Respondents (Women)	
	Percent	Number
Age in 5 Year Categories		
15-19	17,1	1 273
20-24	18,0	1 343
25-29	18,1	1 351
30-34	15,8	1 182
35-39	15,1	1 124
40-44	10,4	774
45-49	5,5	414
Current Marital Status		
Never Married	26,6	1 982
Married	59,9	4 471
Living Together	5,7	428
Widowed	2,7	200
Divorced	4,0	296
Separated	1,1	84
Residence		
Urban	52,3	3 904
Rural	47,7	3 557
Region		
Central	34,5	2 576
East	9,1	678
West	21,0	1 569
South	6,2	462
Ulaanbaatar	29,2	2 176
Highest Education Level		
Primary or Less	10,9	813
Incomplete Secondary	24,6	1 835
Complete Secondary	29,7	2 215
More than Secondary	34,8	2 598
Currently Attending School		
Yes	10,5	781
No	89,5	6 680
Religion		
Atheist	33,3	2 485
Buddhist	62,0	4 628
Muslim	2,3	171
Protestant/Christian	2,0	148
Other	0,4	29
Total	**100,0**	**7 461**

The educational level of women of reproductive age, by age group, residence and regions is examined in Table 2.10. While it may appear that the youngest women are less educated than those in their 20s and 30s, it must be remembered that many of them are still in school. Women living in urban areas, and particularly those in Ulaanbaatar, have a higher level of education than other women. Nearly 46 percent of

women in Ulaanbaatar have studied beyond the secondary school level; this is true of only 25 percent of women in rural areas, 25 percent of women in South region, and 30 percent of women in Central region.

Table 2.10 Percentage Distribution of Women Respondents by Highest Level of Education Attained, According to Age, Residence, and Region, Mongolia 1998

Background Characteristics	Highest Educational Level					Number
	Primary or Less	Incomplete Secondary	Complete Secondary	More than Secondary	Total	
Age in 5 Year Categories						
15-19	23,2	41,9	33,1	1,8	100,0	1 273
20-24	6,5	30,3	43,2	20,0	100,0	1 343
25-29	3,2	18,3	33,9	44,6	100,0	1 351
30-34	4,1	17,3	30,5	48,1	100,0	1 182
35-39	9,9	18,9	21,4	49,9	100,0	1 124
40-44	16,8	20,9	12,5	49,7	100,0	774
45-49	23,7	16,7	14,3	45,4	100,0	414
Residence						
Urban	4,7	16,8	34,3	44,2	100,0	3 904
Rural	17,7	33,1	24,6	24,5	100,0	3 557
Region						
Central	13,9	27,9	28,7	29,5	100,0	2 576
East	11,7	29,8	24,0	34,5	100,0	678
West	15,5	29,4	23,6	31,4	100,0	1 569
South	14,5	36,8	23,8	24,9	100,0	462
Ulaanbaatar	3,0	13,0	38,2	45,8	100,0	2 176
Total	**10,9**	**24,6**	**29,7**	**34,8**	**100,0**	**7 461**

Exposure to the Mass Media

In order to determine whether one received any information from the outside world in the week prior to the survey, questions concerning the three main sources of mass media (radio, TV and newspaper) were included in the questionnaires for women and husbands. Table 2.11 shows that nearly 6 percent of women, as well as husbands, reported that they did not receive any information in the past week. Looking at residence and educational level, 11 percent of rural women, 1 percent of urban women, and 16 percent of women with primary education or less reported that they did not receive any information in the past week. The survey shows that radio appears to be the most common source of information in Mongolia (79 percent of women, 81 percent of husbands). It is followed closely by newspapers (75 percent of women and husband. Approximately one half of women and men reported exposure in the last week to all three mass media. This figure rises to 75 percent in urban areas, and to 83 percent in Ulaanbaatar.

Table 2.11 Percentage of Women Who Usually Read a Newspaper, Watch Television, or Listen to a Radio at Least Once a Week, by Background Characteristics, and Summary Information for Husbands, Mongolia 1998

Background Characteristics	Mass Communication Media					Number of Respondents
	No Mass Media	Reads Newspaper	Watches Television	Listens to Radio	All Three Media	
Age in 5 Year Categories						
15-19	5,6	74,6	69,5	78,4	49,5	1 273
20-24	5,6	76,7	62,5	79,3	47,3	1 343
25-29	7,0	73,3	62,5	75,9	43,8	1 351
30-34	6,1	74,5	71,7	75,6	51,7	1 182
35-39	5,0	73,9	73,5	80,6	53,7	1 124
40-44	5,9	75,7	71,4	80,2	55,6	774
45-49	4,8	73,4	74,6	85,5	57,5	414
Residence						
Urban	1,0	88,3	96,0	83,9	75,2	3 904
Rural	11,1	59,7	38,2	72,7	22,7	3 557
Region						
Central	7,3	68,4	62,0	72,2	39,4	2 576
East	9,4	66,5	58,1	69,8	36,6	678
West	9,0	65,1	45,2	77,0	30,5	1 569
South	6,5	66,7	58,0	85,7	42,6	462
Ulaanbaatar	0,5	93,2	98,2	88,5	82,7	2 176
Highest Education Level						
Primary or Less	16,2	46,2	35,7	70,8	17,8	813
Incomplete Secondary	8,1	64,3	54,5	75,7	34,8	1 835
Complete Secondary	4,2	81,1	74,9	78,8	56,9	2 215
More than Secondary	2,3	85,5	83,0	82,8	65,2	2 598
All Women	**5,8**	**74,7**	**68,4**	**78,6**	**50,1**	**7 461**
Husbands	**5,6**	**75,2**	**68,5**	**81,2**	**52,3**	**1 557**

Employment

Table 2.12 shows that about 43 percent of all women reported that they were not currently employed. This indicator was 51 percent in urban areas, 50 percent in Ulaanbaatar while it was only 34 percent in rural areas. If we look by educational level, the women least likely to work are those with incomplete or completed secondary, while those with either primary schooling or less, or more than secondary schooling are the most likely to work. A little over 47 percent of all women, 38 percent of urban women and 58 percent of rural women were employed 5 or more days per week. The percentages of women who were employed 5 or more days per week were highest for women with primary or less education, and at the other extreme, those with more than completed secondary education.

Table 2.12 Percentage Distribution of Women by Whether Currently Employed and by Continuity of Employment, According to Background Characteristics, Mongolia 1998

Background Characteristics	Employment						Total	Number
	Not Employed No Work Last 12 Month	Not Employed Worked Last 12 Month	Employed All year 5+ days	Employed All year < 5 days	Employed Seasonally	Employed, Occasionally		
Age in 5 Year Categories								
15-19	66,2	2,3	27,7	0,5	1,5	1,8	100,0	1 273
20-24	41,7	6,9	43,3	2,8	3,6	1,6	100,0	1 343
25-29	32,6	6,3	51,4	3,4	4,0	2,4	100,0	1 351
30-34	31,8	5,9	50,1	4,1	5,4	2,7	100,0	1 182
35-39	25,5	4,6	57,1	4,1	6,1	2,5	100,0	1 124
40-44	25,7	3,4	58,8	3,9	6,1	2,2	100,0	774
45-49	31,4	4,3	52,7	4,6	3,9	3,1	100,0	414
Residence								
Urban	45,0	6,0	38,2	3,9	4,1	2,7	100,0	3 904
Rural	30,3	3,8	57,5	2,2	4,4	1,7	100,0	3 557
Region								
Central	38,0	4,9	47,8	2,5	5,0	1,8	100,0	2 576
East	34,4	6,3	52,5	1,2	2,4	3,2	100,0	678
West	33,5	4,0	51,7	3,1	5,1	2,7	100,0	1 569
South	29,0	1,9	63,0	2,4	2,4	1,3	100,0	462
Ulaanbaatar	44,3	6,0	38,9	4,6	3,8	2,3	100,0	2 176
Highest Education Level								
Primary or Less	39,4	1,8	53,5	1,4	3,0	1,0	100,0	813
Incomplete Secondary	44,9	3,3	44,8	1,3	3,9	1,7	100,0	1 835
Complete Secondary	45,3	5,9	37,4	3,6	4,8	3,0	100,0	2 215
More than Secondary	26,4	6,4	55,9	4,5	4,5	2,3	100,0	2 598
Total	**38,0**	**5,0**	**47,4**	**3,1**	**4,3**	**2,2**	**100,0**	**7 461**

Table 2.13 presents the percentage distribution of employed women by cash earnings and sectors. About 88 percent of all employed women received cash earnings. Out of all employed women, about 56 percent were self-employed, 34 percent were in the public (governmental) sector, and 10 percent were in the private sector or worked for non-governmental organizations. Most (71 percent) of the employed women in Ulaanbaatar city were employed in government, private and non-

governmental organizations while most of the employed women in other regions reported that they are self-employed. Three quarters of employed women in South region reported that they were self-employed. It appears to be the highest compared with other regions. The share of women employed in public, private and non-governmental organizations increases and the share of self-employed decreases as educational level increases. For example, about 91 percent of women with primary or less education were self-employed, while 32 percent of women with vocational, technical or higher education were self-employed and the remaining 68 percent were employed in public, private and non-governmental organizations.

Table 2.13 Percentage Distribution of Employed Women by Employer and Whether Receives Cash Earnings, According to Background Characteristics, Mongolia 1998

Background Characteristics	Employer						Total	Number
	Self, Earns Cash	Self, Doesn't Earn Cash	Public, Earns Cash	Public, Doesn't Earn Cash	Private, NGO, Earns Cash	Private, NGO, Doesn't Earn Cash		
Age in 5 Year Categories								
15-19	45,9	22,7	5,2	16,7	8,2	1,2	100,0	401
20-24	52,1	16,1	18,4	1,7	11,0	0,7	100,0	691
25-29	50,2	11,1	29,8	0,1	8,5	0,2	100,0	826
30-34	45,2	6,4	38,2	0,7	9,4	0,1	100,0	736
35-39	41,7	4,1	42,2	0,0	12,0	0,1	100,0	785
40-44	39,0	5,5	43,4	0,4	11,8	0,0	100,0	549
45-49	40,6	8,3	39,8	0,4	10,9	0,0	100,0	266
Residence								
Urban	30,5	0,7	46,7	3,1	18,4	0,6	100,0	1 911
Rural	58,0	17,5	19,5	1,2	3,6	0,1	100,0	2 343
Region								
Central	47,7	13,5	25,8	4,4	8,4	0,3	100,0	1 471
East	58,7	2,5	31,3	0,0	7,2	0,2	100,0	402
West	51,0	17,5	27,9	0,4	3,1	0,1	100,0	981
South	62,1	12,9	22,3	0,0	2,8	0,0	100,0	319
Ulaanbaatar	28,3	0,3	46,3	1,9	22,6	0,7	100,0	1 081
Highest Education Level								
Primary or Less	64,2	26,4	5,4	1,3	2,5	0,2	100,0	478
Incomplete Secondary	60,9	15,8	12,7	3,9	6,4	0,2	100,0	950
Complete Secondary	50,6	8,4	25,0	3,4	11,7	0,8	100,0	1 080
More than Secondary	29,1	3,3	53,4	0,5	13,6	0,1	100,0	1 746
Total	**45,6**	**10,0**	**31,7**	**2,1**	**10,2**	**0,3**	**100,0**	**4 254**

Table 2.14 and Figure 2.4 show that when we classify employed women by current occupation, 40 percent were farmers or herders, 24 percent were employed as managers, professionals, technicians or clerks, and 18 percent were employed in sales or services. If we look at occupation by age group, the percentage of women working as managers, professionals, technicians and clerks increases with increasing age, while most (59 percent) of the women aged 15-19 were working as farmers or herders. In rural areas, 68 percent of employed women are farmers or herders. But in urban areas, 37 percent of employed women are managers, professionals, technicians or clerks, and 30 percent are sales or service workers.

Most of the employed women with primary or less education (87 percent) are farmers or herders, while only 15 percent of women with vocational, technical or higher education have this occupation. Almost 71 percent of women with more than

completed secondary education were employed as managers, professionals, technicians, clerks, or as sales or service workers.

Table 2.14 Percentage Distribution of Employed Women by Current Occupation According to Background Characteristics, Mongolia 1998

Background Characteristics	Respondent's Occupation								
	Manag. Prof. Tech. Cleric	Sales, Service	Farmer, Herder	Skilled	Unskilled	Domestic Service	Not Specified	Total	Number
Age in 5 Year Categories									
15-19	2,2	11,5	59,4	6,2	1,0	2,5	17,2	100,0	401
20-24	13,9	15,2	52,8	11,6	2,9	1,4	2,2	100,0	691
25-29	23,5	15,4	45,0	11,0	2,9	1,7	0,5	100,0	826
30-34	28,7	20,4	31,4	11,4	4,3	3,5	0,3	100,0	736
35-39	30,4	21,4	28,9	11,3	5,1	2,7	0,1	100,0	785
40-44	32,2	23,3	29,5	6,6	4,6	3,8	0,0	100,0	549
45-49	33,1	18,8	32,7	8,6	4,1	2,6	0,0	100,0	266
Residence									
Urban	37,3	30,1	4,3	15,8	5,3	3,7	3,4	100,0	1911
Rural	12,9	8,5	68,2	5,4	2,3	1,6	1,1	100,0	2343
Region									
Central	17,3	15,4	48,1	8,8	3,3	2,5	4,6	100,0	1471
East	23,1	18,4	45,3	8,5	3,0	1,7	0,0	100,0	402
West	18,7	12,8	56,7	6,4	2,9	2,5	0,0	100,0	981
South	13,5	9,4	66,8	6,9	1,9	1,3	0,3	100,0	319
Ulaanbaatar	40,8	29,3	2,1	16,7	5,6	3,3	2,1	100,0	1081
Highest Education Level									
Primary or Less	0,0	2,7	86,8	4,6	2,7	1,7	1,5	100,0	478
Incomplete Secondary	2,7	13,5	65,3	8,8	2,9	2,8	3,9	100,0	950
Complete Secondary	9,7	26,3	35,4	15,5	5,0	4,4	3,8	100,0	1080
More than Secondary	50,6	20,0	15,2	8,9	3,5	1,5	0,3	100,0	1746
Total	**23,8**	**18,2**	**39,5**	**10,1**	**3,7**	**2,6**	**2,1**	**100,0**	**4254**

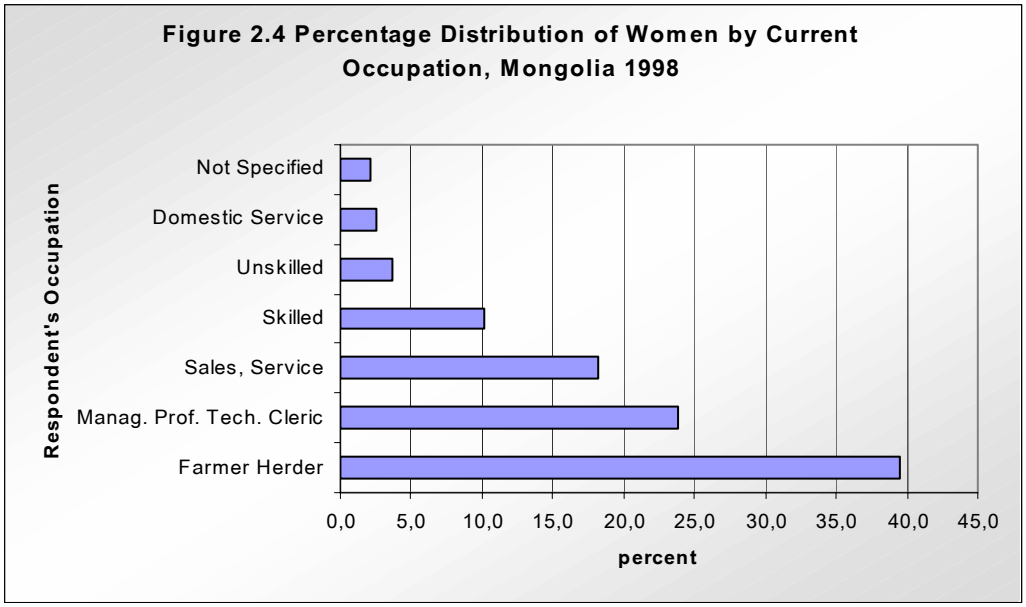


Table 2.15 presents information on who decides how to use the money that women earn. Around 31 percent of all women reported that they themselves decide how to spend their money, and 48 percent decide with their partner. The percentage of women who decide themselves how to use earnings increases with age. But 62 percent of women aged 15-19 reported that someone else (generally a parent) decides on how to use their earnings. The percentage of women who make their own decision on use of earnings is two to three times higher in urban areas than rural areas and increases with increase in education, from 18 percent of the least educated to 38 percent of the best educated.

Table 2.15 Percentage Distribution of Women Receiving Cash Earnings by Person Who Decides on Use of Earnings, According to Background Characteristics, Mongolia 1998

Background Characteristics	Who Decides How To Spend Money						
	Respondent	Partner	Jointly With Parther	Someone Else	Jointly With Someone	Total	Number
Age in 5 Year Categories							
15-19	16,0	2,9	8,4	62,2	10,5	100,0	238
20-24	25,4	8,3	41,2	19,7	5,3	100,0	563
25-29	25,7	11,8	55,1	5,2	2,2	100,0	731
30-34	32,7	9,2	55,3	2,0	0,7	100,0	683
35-39	35,5	11,0	51,3	0,9	1,2	100,0	752
40-44	39,5	9,9	48,5	0,0	2,1	100,0	517
45-49	40,7	9,9	46,9	0,0	2,5	100,0	243
Residence							
Urban	43,9	5,4	41,5	6,1	3,1	100,0	1827
Rural	18,9	13,8	54,0	10,8	2,4	100,0	1900
Region							
Central	30,1	11,0	46,8	8,3	3,8	100,0	1204
East	30,7	9,5	48,6	10,2	1,0	100,0	391
West	18,7	15,7	53,4	10,8	1,5	100,0	804
South	20,1	5,8	61,5	8,3	4,3	100,0	278
Ulaanbaatar	45,1	4,7	41,0	6,5	2,7	100,0	1050
Highest Education Level							
Primary or Less	18,3	18,0	42,0	18,3	3,5	100,0	345
Incomplete Secondary	22,3	12,4	47,3	15,1	2,9	100,0	761
Complete Secondary	30,5	7,6	47,5	10,6	3,7	100,0	943
More than Secondary	38,2	7,9	49,5	2,4	2,0	100,0	1678
Current Marital Status							
Not Married	50,9	2,3	10,3	28,0	8,5	100,0	1122
Currently Married	22,7	12,9	64,0	0,2	0,3	100,0	2605
Total	**31,2**	**9,7**	**47,9**	**8,5**	**2,7**	**100,0**	**3727**

CHAPTER III

FERTILITY

Gereltuya Altankhuyag

The main idea of classical demographic transition theory is that changes in modernization or industrialization bring about a decline in mortality, followed by a decline in fertility. However, the experiences of some developing countries show that modernization or industrialization need not be the main cause of fertility decline. Freedman (1982:259) stated: "The fact is that fertility decline already has occurred in a number of countries with only a limited subset of the development changes".

Until 1989, Mongolia had a centrally planned economy for about 70 years. This country is not a developed country; however, it successfully implemented a pro-natalist policy. The main element in the Mongolian pro-natalist policy was monetary "maternal incentives" for women to bear many children. After 1989, Mongolia began to move towards a market economy. This transition resulted in a number of social and economic changes, including changes in population policy. The current population policy of the country does not set a specific fertility target, but aims at a 1,8 percent annual population growth rate. Fertility has declined significantly since the middle of the 1970s, and this trend intensified during the 1990s.

This chapter presents current levels of fertility as well as trends over the past twenty years using different tabulations with different variables. Fertility differentials (current and completed fertility) are discussed based on women's residence, region and education level. Birth intervals, women's age at first birth and their differentials are taken into consideration in relation to demographic and background characteristics. Some statistics are addressed to teenagers' fertility, which might be an important or challenging issue for policy-makers.

Current Fertility

Table 3.01 shows age-specific and cumulative fertility rates and crude birth rate for the three years preceding the survey by urban-rural residence. A three-year rate is chosen as a compromise of two criteria: to get the most current information, and to reduce sampling error. (A one-year rate would be the most recent, while a five-year rate would be more stable from a sampling standpoint.) There are significant differences between urban and rural age-specific fertility rates for all age groups. The highest age-specific fertility rate occurs among women aged 20-24 in both areas.

The total fertility rate (TFR) is used to summarize the current level of fertility, and can be interpreted as the number of children a woman would have by the end of her childbearing years if she passed through those years bearing children at the currently observed rates. The current TFR for Mongolia indicates that on average a woman would bear 3,06 children during her reproductive period. See Appendix B for confidence limits of survey estimates. The TFR based on vital statistics indicates a figure of 2,3 children per woman in 1998. The difference between these two levels of TFR shows that vital statistics coverage of fertility is probably incomplete. In

Mongolia, there is legislation that parents are responsible to register their new baby within one month. However, in practice this rule is not always observed, particularly in the case of deaths that occur during the first month after birth. This permits concluding that the TFR in Mongolia is well above the replacement level of 2,1 or 2,2. However, the TFR for urban women is 2,46 children per woman, which is near the replacement level. In comparison, the TFR for rural women is 3,66.

Table 3.01 Age-specific and Cumulative Fertility Rates and Crude Birth Rate for the Three Years Preceding the Survey, by Urban-Rural Residence, Mongolia 1998

	Residence		
	Urban	Rural	Total
Age 5-year Group			
15-19	38	72	54
20-24	158	269	216
25-29	144	193	169
30-34	95	116	105
35-39	41	61	50
40-44	16	21	18
Fertility Rate			
TFR 15-49	2,46	3,66	3,06
TFR 15-44	2,46	3,66	3,06
GFR	87	141	113
CBR	23,1	33,7	28,5

Note: TFR is Total Fertility Rate
GFR is General Fertility Rate
CBR is Crude Birth Rate

The general fertility rate (GFR) is calculated by dividing the number of births in the three year period, including births to women under age 15 and to women over 44, by the number of women-years lived between the ages of 15 and 44 during the three years, multiplied by 1000. At the national level, the GFR is 113 births per 1000 women of reproductive age. The GFR is much higher for women in the rural area than in the urban area.

The crude birth rate (CBR) is calculated as the sum of the product of the age-specific fertility rates multiplied by the proportion of women in the specific age group out of the total de-facto population, male and female. It can be interpreted as the number of births in a year per 1000 population at mid-year. There is a large difference between the CBRs in urban and rural areas, which are 23,1 and 33,7 children per 1000 population, respectively. The overall figure of 28,5 is much higher than the rate of 20,6 for 1998 obtained from vital statistics registration data.

Table 3.02 shows total fertility rates for the three years preceding the survey and mean number of children ever born to women aged 40-49 by selected indicators. Among the regions, Ulaanbaatar has the lowest TFR at 2,17 children per woman; in contrast the TFR in West region is the highest at 3,85 children per woman. The current fertility is decreasing as the education level of women is increasing. Women

with less than nine grades of schooling have higher fertility compared to women with more than 10 grades of schooling. Completed fertility for women aged 40-49 is higher for women in the rural area than that in urban area. The highest number of children ever born is to women in West and East regions, and it is followed by women in Central and South regions. The lowest completed fertility observed for women is in Ulaanbaatar. The difference between current and completed fertility confirms that there is fertility decline. The mean number of children ever born to women aged 40-49 ranges between 4,10 and 6,42 depending on residence, region and highest level of education, whereas the current fertility ranges between 2,17 and 3,85. Fertility decline took place for women in all categories. Fertility declined furthest for women in urban areas, for women in East region and in Ulaanbaatar, and for women with less than four grades of schooling.

Table 3.02 Total Fertility Rate for the Three Years Preceding the Survey, and Mean Number of Children Ever Born (CEB) to Women 40-49 Years of Age, by Selected Background Characteristics, Mongolia 1998

Background Characteristics	Total Fertility Rate	Mean CEB (40-49)
Residence		
Urban	2,46	4,42
Rural	3,66	6,09
Region		
Central	3,22	5,46
East	2,98	5,73
West	3,85	5,86
South	3,51	5,46
Ulaanbaatar	2,17	4,10
Highest Education Level		
Primary or Less	3,37	6,42
Incomplete Secondary	3,75	5,82
Complete Secondary	2,93	5,10
More than Secondary	2,78	4,33
Total	**3,06**	**5,12**

Fertility Trends

Table 3.03 and Figure 3.1 show age-specific fertility rates for four five-year periods preceding the survey. Age-specific fertility rates decrease as time before the survey decreases for women aged 20-24, in contrast, they increased for women aged 15-19 for the two most recent five-year periods. It indicates that fertility dropped for women aged 20-34 for the last 15 years, while in comparison, teenagers' fertility increased for the last 10 years. The increase of teenagers' fertility is either a result of changes in the teenagers' sexual behavior, or decrease of adolescent sub-fecundity, or both. The calculation of TFR for women aged 15–34 shows that there is fertility decline for the last 15 to 20 years. TFR for these women decreased from 4,7 children per woman in 1979-1983 to 2,8 children per woman in 1994-1998. Age specific fertility rates for women aged 35–44 are not discussed due to the truncation problem.

Table 3.03 Age-Specific Fertility Rates for Five-Year Periods Preceding the Survey, Mongolia 1998

Age group	Five-Year Periods			
	0-4	5-9	10-14	15-19
15-19	58	54	41	57
20-24	224	276	282	303
25-29	171	226	306	331
30-34	105	151	213	255
35-39	49	75	158	-
40-44	19	23	-	-

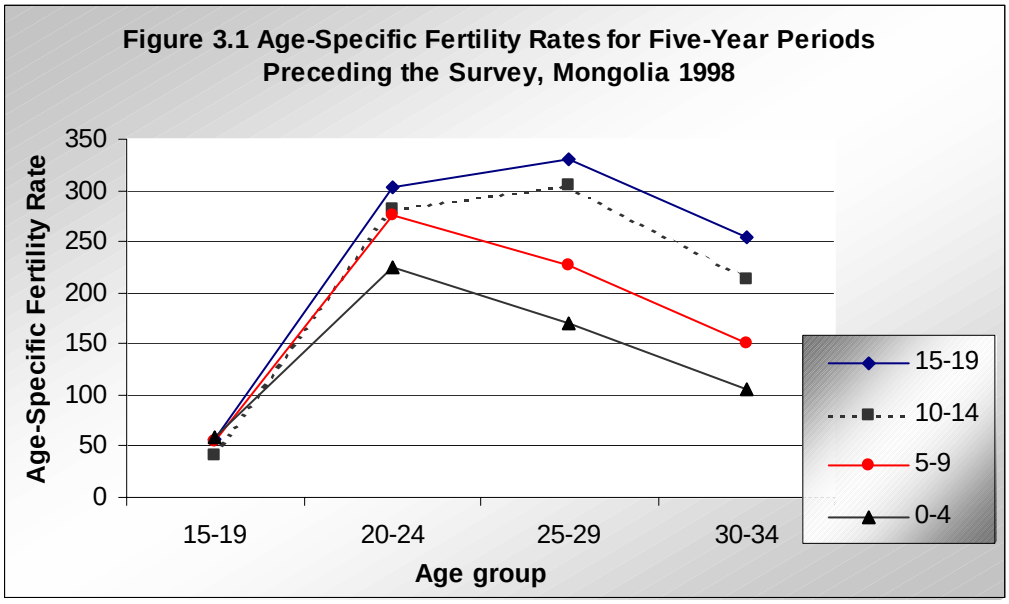


Table 3.04 Fertility Rates for Ever-Married Women by Duration Since First Marriage in Years for Five-Year Periods Preceding the Survey, Mongolia 1998

Duration Since First Marriage (In Years)	Five-Year Periods			
	0-4	5-9	10-14	15-19
0-4	318	370	400	402
5-9	147	215	306	338
10-14	95	135	224	283
15-19	42	83	152	326
20-24	23	44	130	-
25-29	4	13	-	-

Table 3.04 shows fertility rates for ever-married women by duration since the first marriage for five-year periods preceding the survey. Duration-specific fertility rates increase as time before the survey increases. These rates of fertility confirm that fertility has been falling for the last two decades. For instance, the fertility rate for women who have been in marriage for 0-4 years in 1979-1983 was 402 children per 1000 women and it reached 318 children for women who have been in marriage for 0-4 years in 1994-1998. Similarly, duration-specific fertility rates decreased across the board. (For the last two groups of marriage duration the duration-specific fertility rates are incomplete due to truncation.) Fertility rates estimated in Tables 3.03 and 3.04 demonstrate that fertility has decreased sharply over the last 20 years.

Cumulative Fertility

Table 3.05 shows the percent distribution of all women and of currently married women by number of children ever born and the means of number of children ever born and still living according to mother's age group. About one fourth of the total number of all interviewed women had not given birth yet and about half of all women had given birth to from one to three children. In Mongolia, most of fertility takes place within marriage. It can be seen from the second panel of Table 3.05 that about 25 per cent of married women had given birth to two children. The mean number of children ever born for all women is 2,4 and this number increased to 3,1 for currently married women. The mean number of children ever born increases as the age of women increases. For instance, women at the end of reproductive age had an average of six children; in contrast younger women had on average less than one child. The mean number of children ever born for women aged 15-19 is 0,73 for married women while it is 0,08 for all women. In contrast, the mean number of children ever born is about the same (about 6) for older married women and for the whole sample. This gap is larger for younger women, because of the large number of unmarried women with negligible fertility. About 11 per cent of children ever born died for both all women and currently married women. (The purpose of including the information contained in the final column is to permit calculation of an indirect measure of infant and child mortality.)

Table 3.05 Percent Distribution of All Women and Currently Married Women by Number of Children Ever Born and Mean Number Ever Born and Living According to Age Group, Mongolia 1998

Age Group	Children Ever Born												Number of Women	Mean CEB	Mean Living Children
	0	1	2	3	4	5	6	7	8	9	10+	Total			
For All Women															
15-19	92,8	6,9	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	100,0	1 273	0,08	0,07
20-24	39,8	40,0	17,1	3,0	0,1	0,0	0,0	0,0	0,0	0,0	0,0	100,0	1 343	0,84	0,78
25-29	9,7	26,4	37,1	18,7	6,2	1,5	0,5	0,0	0,0	0,0	0,0	100,0	1 351	1,92	1,76
30-34	2,5	12,0	28,7	29,4	14,4	8,1	3,6	1,0	0,3	0,0	0,0	100,0	1 182	2,87	2,56
35-39	1,2	6,7	17,3	21,6	21,4	13,3	9,7	4,5	2,5	0,8	1,1	100,0	1 124	3,87	3,41
40-44	0,8	1,6	9,6	18,5	17,8	18,1	12,5	9,7	5,8	3,0	2,7	100,0	774	4,84	4,26
45-49	0,2	3,4	7,0	12,3	14,0	11,6	15,0	11,4	12,1	6,3	6,8	100,0	414	5,64	4,86
Total	**25,4**	**16,4**	**18,4**	**14,4**	**9,3**	**6,1**	**4,3**	**2,5**	**1,7**	**0,8**	**0,8**	**100,0**	**7 461**	**2,36**	**2,10**
Currently Married Women															
15-19	29,4	68,2	2,4	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	100,0	85	0,73	0,73
20-24	12,1	55,7	26,9	5,1	0,3	0,0	0,0	0,0	0,0	0,0	0,0	100,0	767	1,26	1,17
25-29	3,6	23,6	42,2	21,4	6,9	1,7	0,6	0,0	0,0	0,0	0,0	100,0	1 110	2,12	1,95
30-34	0,7	9,0	29,4	30,8	16,2	8,5	3,8	1,2	0,4	0,0	0,0	100,0	1 010	3,02	2,69
35-39	0,5	4,8	15,9	21,7	22,4	13,9	10,9	4,9	2,8	0,9	1,3	100,0	957	4,05	3,58
40-44	0,6	1,1	8,5	18,2	17,5	20,1	11,8	9,6	6,0	3,6	2,8	100,0	633	4,94	4,33
45-49	0,3	3,6	6,5	11,9	13,6	11,9	15,4	11,3	11,9	5,9	7,7	100,0	337	5,70	4,93
Total	**3,6**	**18,4**	**24,5**	**19,4**	**12,5**	**8,3**	**5,6**	**3,2**	**2,2**	**1,1**	**1,1**	**100,0**	**4 899**	**3,13**	**2,79**

Birth Intervals

Table 3.06 shows the percent distribution of births (excluding first births) in the five years before the survey by the number of months since the previous birth, for various demographic and background characteristics. Birth interval is one of the factors that influence fertility change. It has also been proved that if a child is born less than 24 months after the previous birth, that child has a greater risk of sickness and death compared to a child born after more than two years. Survey results show that 27 per cent of births occurred in less than 24 months after the preceding birth during the last five years, while in contrast 32 per cent of births occurred after more than four years. The median months since the previous birth is 34,6. Birth intervals vary in accordance with demographic and background characteristics of women. Birth intervals are longer for urban women than that for rural women. The highest percentage of births that occurred in less than two years occurs to women in West region, with 32 per cent. In contrast, that is 18 and 25 per cent for women in Ulaanbaatar and Central region, respectively. About 31 per cent of births occurring to women with the education level of grade 4-8 were born within 24 months after the previous birth. In contrast, this percentage is 23 and 26 for women with education of more than secondary and of less than grade 4, respectively.

Table 3.06 Percent Distribution of Births in the Five Years Before Survey by Interval Since Previous Birth According to Demographic and Background Characteristics, Mongolia 1998

Background Characteristics	Months Since Previous Birth							
	7-17	18-23	24-35	36-47	48+	Total	Number	Median
Mother's Age								
15-19	*	*	*	*	*	*	4	*
20-29	16,5	20,5	29,0	16,1	17,8	100,0	1 296	28,2
30-39	6,9	10,4	23,2	14,1	45,5	100,0	1 137	44,0
40+	3,0	5,9	11,1	21,5	58,5	100,0	135	-
Birth Order								
2-3	12,5	16,3	24,6	15,1	31,5	100,0	1 751	33,7
4-6	9,4	12,3	27,5	15,4	35,4	100,0	628	36,6
7+	9,3	15,0	27,5	19,7	28,5	100,0	193	34,2
Sex of Prior Birth								
Male	11,3	16,0	25,5	15,1	32,1	100,0	1 285	34,2
Female	11,7	14,5	25,6	15,9	32,3	100,0	1 287	34,8
Survival of Prior Birth								
No	30,4	19,3	21,9	10,4	18,1	100,0	270	24,1
Yes	9,3	14,8	26,0	16,1	33,8	100,0	2 302	36,0
Residence								
Urban	8,7	9,8	21,1	14,2	46,1	100,0	908	44,3
Rural	13,0	18,2	27,9	16,2	24,6	100,0	1 664	30,6
Region								
Central	10,3	15,0	24,5	16,3	34,0	100,0	907	36,2
East	14,1	15,5	24,7	15,2	30,4	100,0	283	32,9
West	13,0	19,1	30,8	15,2	21,9	100,0	776	29,6
South	11,8	16,1	26,9	16,7	28,5	100,0	186	33,8
Ulaanbaatar	9,5	8,1	18,1	14,0	50,2	100,0	420	48,1
Highest Education Level								
Primary or Less	11,3	14,4	25,6	21,5	27,2	100,0	195	35,4
Incomplete Secondary	13,6	17,2	28,1	16,7	24,4	100,0	676	30,9
Complete Secondary	12,2	16,6	25,9	14,2	31,1	100,0	753	33,5
More than Secondary	9,5	13,0	23,4	14,5	39,7	100,0	948	38,9
Total	**11,5**	**15,2**	**25,5**	**15,5**	**32,2**	**100,0**	**2 572**	**34,6**

* Percentage based on fewer than 25 cases

Note: Table excludes first births.

If the previous child died, one would expect that the birth of the next child would follow quickly, and consequently the duration of the birth interval would be short. This hypothesis is confirmed by the survey. For example, the median months since the previous birth is 24 for births that occurred after the death of the previous child, whereas the median interval is 36 months for births that occurred while the previous child is alive.

Age at First Birth

Table 3.07 presents the percent distribution of women by age at first birth according to current age of women. Age at first birth is one of the determinants of fertility change. The proportions of women who gave birth before age 20 by age group indicate that teenagers' fertility at first declined, but more recently has increased. About 36 per cent of women currently aged 45-49 had their first birth before the age of 20; this declined to 20 percent for women currently of ages 30-34, then increased to 25 percent for women now 20-24 years old.

Table 3.07 Percent Distribution of Women by Age at First Birth, According to Current Age, Mongolia 1998

Age group	Age at First Birth									
	No Birth	<15	15-17	18-19	20-21	22-24	25+	Total	Number	Median
15-19	92,8	0,2	3,1	3,9	-	-	-	100,0	1 273	-
20-24	39,8	0,1	5,3	19,3	26,1	9,3	-	100,0	1 343	-
25-29	9,7	0,1	3,7	17,5	34,3	27,8	7,0	100,0	1 351	21,7
30-34	2,5	0,1	4,4	15,7	27,4	36,1	13,8	100,0	1 182	22,1
35-39	1,2	0,2	5,7	20,1	29,9	27,9	14,9	100,0	1 124	21,6
40-44	0,8	0,4	9,3	22,9	29,7	26,2	10,7	100,0	774	21,2
45-49	0,2	0,0	8,9	27,3	31,4	22,7	9,4	100,0	414	21,0

Table 3.08 Median Age at First Birth Among Women Aged 25-49 Years, by Current Age and Selected Background Characteristics, Mongolia 1998

Background Characteristics	Age 5-year Group					
	25-29	30-34	35-39	40-44	45-49	25-49
Residence						
Urban	22,2	22,4	21,9	21,5	21,3	22,0
Rural	21,3	21,9	21,2	20,8	20,6	21,3
Region						
Central	21,3	22,0	21,3	20,7	20,4	21,3
East	21,0	21,2	20,8	20,8	19,9	20,9
West	22,1	22,8	22,0	21,7	21,1	22,2
South	20,6	21,1	21,1	20,7	21,3	20,9
Ulaanbaatar	22,4	22,5	21,9	21,7	21,7	22,1
Highest Education Level						
Primary or Less	20,5	19,8	19,9	20,0	20,3	20,1
Incomplete Secondary	20,7	20,6	20,6	20,6	20,4	20,6
Complete Secondary	21,6	22,2	21,8	20,8	21,1	21,7
More than Secondary	22,1	22,6	22,2	21,8	21,6	22,2
Total	**21,7**	**22,1**	**21,6**	**21,2**	**21,0**	**21,6**

Table 3.08 presents median age at first birth by background characteristics of women. It is not possible to calculate a median for the age group 20-24 years, since fewer than 50 percent of these women had given birth by age 20, the start of the age interval. Therefore, median age at first birth is calculated for the 25-49 age groups, and is 21,6 years. This is consistent with the median age at first marriage, which is 20,8 years (see Chapter 5). One-half of women in urban areas have given birth at 22 years of age, while half of women in rural areas have had their first birth at 21,3 years. Women in East and South regions have had their first birth at younger ages compared to women in other regions. The survey indicates that the median age at first birth increases as the education level of women increases. Women with more than grade 10 education gave birth approximately two years later than those with less than grade 4.

Teenage Fertility

Table 3.09 shows the percentage of teenagers 15-19 who are mothers or pregnant with their first child by background characteristics. About nine per cent of the total number of teenagers have begun their childbearing.

Table 3.09 Percentage of Teenagers 15-19 who are Mothers or Pregnant with Their First Child by Background Characteristics, Mongolia 1998

Background Characteristics	Teenage Pregnancy		Percentage Started Childbearing	Number of Teenagers
	Mothers	Pregnant 1st Child		
Teenager's Age				
15	0,7	0,0	0,7	271
16	0,4	0,4	0,7	282
17	5,4	1,7	7,1	241
18	11,5	2,1	13,6	243
19	20,3	5,1	25,4	236
Residence				
Urban	4,7	1,0	5,7	700
Rural	10,3	2,6	12,9	573
Highest Education Level				
Primary or Less	9,2	1,0	10,2	295
Incomplete Secondary	6,4	2,1	8,4	534
Complete Secondary	6,9	1,9	8,8	421
More than Secondary	*	*	*	23
Regions				
Central	8,6	2,9	11,5	442
East	4,9	1,0	5,8	103
West	6,1	1,1	7,2	263
South	22,5	3,8	26,3	80
Ulaanbaatar	3,9	0,5	4,4	385
Total	**7,2**	**1,7**	**9,0**	**1 273**

* Percentage based on fewer than 25 cases

However, there are differentials in accordance with women's background characteristics. The percentage who have begun their childbearing is twice as high for women in rural areas than for those in urban areas. The highest percentage of women who have begun their childbearing is in South region with 26 per cent, and the

following is Central region with 12 per cent. The lowest percentage (4) is for Ulaanbaatar.

Table 3.10 shows the percent distribution of teenagers 15-19 by number of children ever born, by single years of age. About 7 per cent of teenagers have given birth, with a mean number of children of 0,08, which is negligible compared to women in other developing countries. However, one fifth of teenagers aged 19 years old have given birth, and another 5 per cent are pregnant with their first child. This issue might be addressed as an important problem for policy-makers, since there are certain risks attached to teenage pregnancy.

Table 3.10 Percent Distribution of Teenagers 15-19 by Number of Children Ever Born According to Single Year of Age, Mongolia 1998

Teenager's Age	Children Ever Born					Number of Teenagers
	0	1	2+	Total	Mean CEB	
15	99,3	0,7	0,0	100,0	0,01	271
16	99,6	0,4	0,0	100,0	0,00	282
17	94,6	5,0	0,4	100,0	0,06	241
18	88,5	11,5	0,0	100,0	0,12	243
19	79,7	19,1	1,3	100,0	0,22	236
Total	**92,8**	**6,9**	**0,3**	**100,0**	**0,08**	**1 273**

Summary

Fertility in Mongolia has been falling for over two decades, and has now reached a level of 3 children per woman. There are wide differences in fertility across the country: the total fertility rate in West region is 3,85, but only 2,17 in Ulaanbaatar. In general, better educated women have lower fertility than the less educated, and fertility levels in urban areas are lower than in rural areas. Some of the causes of the fertility decline and of differences in levels will be examined in the chapters which follow.

CHAPTER IV

FAMILY PLANNING

Zultsetseg Luvsantseren

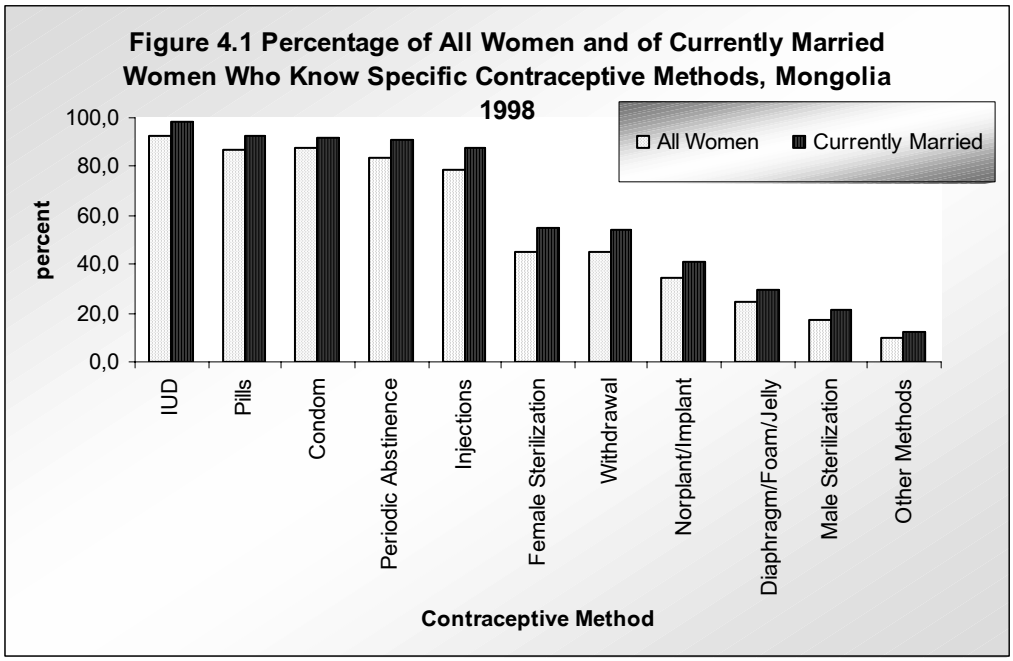
An important attribute of the RHS was that the questions related to family planning and other aspects of reproductive health were asked not only of women of reproductive age, but also from a sample of their husbands. Thus it provides information on the husbands' roles in family planning. This chapter consists of three main parts: knowledge of family planning methods, use of family planning, and intentions to use family planning in the future.

Knowledge of Family Planning Methods

Table 4.01 and Figure 4.1 show knowledge of family planning methods among all women and currently married women by specific methods. Women are classified as "knowing" a method if either they named it spontaneously, of if they recognized it when the interviewer described it. Modern methods include pills, IUD, injections, Norplant/implant, diaphragm, foam, jelly, condom, female sterilization, and male sterilization; traditional methods include periodic abstinence and withdrawal. Methods other than the modern and the traditional are specified as others.

Table 4.01 Percentage of All Women and of Currently Married Women Who Know Any Contraceptive Method by Specific Method, Mongolia, 1998

Contraceptive Method	All Women	Currently Married
Any Method	96,7	99,3
Any Modern Method	96,6	99,2
Pills	86,5	93,0
IUD	92,6	98,4
Injections	78,7	87,4
Norplant/Implant	34,1	41,1
Diaphragm/Foam/Jelly	24,9	29,8
Condom	88,1	91,4
Female Sterilization	45,4	54,7
Male Sterilization	16,9	21,0
Any Traditional Method	85,0	91,7
Periodic Abstinence	84,0	90,6
Withdrawal	44,8	54,2
Other Methods	9,8	12,1
Mean Number of Methods Known	**6,1**	**6,7**
Number of Women	7 461	4 899



Nearly 97 percent of all women, and 99 percent of currently married women stated that they know at least one contraceptive method. This shows that, in general, the level of knowledge of family planning of Mongolian women is very high. Women have a better knowledge of modern methods than of traditional methods. While 97 percent of all women have knowledge of modern methods, 85 percent know of traditional methods. Of all modern methods, the best known are the IUD (93 percent) and condoms (89 percent), while the least known are male sterilization (17 percent) and diaphragm/foam/ jelly (25 percent).

Of the two traditional methods, more women know of periodic abstinence (84 percent). The levels of knowledge of both modern and traditional contraceptive methods are greater for currently married women than for all women. This can be explained by the greater need for currently married women to regulate their childbearing and birth intervals, and to protect their reproductive health. The mean number of methods known by currently married women is 6,7 in comparison with 6,1 for all women.

As already noted, 99 percent of currently married women know at least one contraceptive method. The variations shown in Table 4.02 by age, place of residence, region and educational level are small (never more than 3 percent) and insignificant from both a substantive and statistical stand point.

Table 4.02 Percentage of Currently Married Women Who Know at Least One Method by Selected Background Characteristics, Mongolia 1998

Background Characteristics	Knowledge of contraception		Number of Women
	Knows Any Method	Knows Modern Method	
Age Group			
15-19	97,6	97,6	85
20-24	99,5	99,5	767
25-29	99,1	99,0	1 110
30-34	99,5	99,5	1 010
35-39	99,2	99,2	957
40-44	99,5	99,1	633
45-49	98,8	98,8	337
Residence			
Urban	99,9	99,9	2 384
Rural	98,6	98,5	2 515
Region			
Central	99,2	99,1	1 717
East	99,8	99,8	471
West	98,1	98,0	1 075
South	99,7	99,7	335
Ulaanbaatar	100,0	100,0	1 301
Highest Education Level			
Primary or Less	97,0	96,8	403
Incomplete Secondary	98,5	98,2	1 052
Complete Secondary	99,6	99,6	1 335
More than Secondary	99,9	99,9	2 109
Total	**99,3**	**99,2**	**4 899**

Table 4.03 shows whether women have heard a message about family planning on the radio and/or TV in the month prior to interview, by age group, residence, region and educational level. According to the report of all women, few received information about family planning from radio and TV. About 64 percent of women reported that they did not receive any information about family planning in the month prior to the interview. It differs by age group, residence, region, and educational level. For example, 73 percent of women aged 15-19 reported that they did not hear about family planning by radio or by TV, while 59 percent of women aged 45-49 reported the same.

Mongolian women receive information about family planning more by TV than by radio. But if we look by residence, urban women receive messages about family planning more by TV (21 percent) than by radio (5 percent), while rural women receive messages about family planning more by radio (14 percent) than by TV (7 percent). According to regional differentials, women in Ulaanbaatar receive messages about family planning more by TV (23 percent), while women in the West region receive messages about family planning more by radio (15 percent) compared with those in other regions.

The levels of receiving information about family planning both by TV and radio increase with increase in educational level. For example, 3 percent of women with primary education reported that they heard about family planning both by radio and TV, while 18 percent of women with vocational and higher education reported the same.

About 67 percent of married men reported that they did not hear any messages about family planning in the month prior to interview by radio or by TV. The figures for men are very similar to those for women.

Table 4.03 Percent Distribution of All Women by Whether They Have Heard a Radio or Television Message About Family Planning in the Month Prior to Interview, According to Selected Background Characteristics, and Husbands' Summary Information, Mongolia 1998

Background Characteristics	Heard Family Planning Message on Radio or Television					
	Radio/ Television	Radio Only	Television Only	Neither	Total	Number of Cases
Age Group						
15-19	8,6	6,2	12,3	72,8	100,0	1 273
20-24	11,2	10,7	15,6	62,5	100,0	1 343
25-29	11,6	11,0	13,8	63,5	100,0	1 351
30-34	14,5	8,9	15,0	61,7	100,0	1 182
35-39	15,3	9,2	14,7	60,9	100,0	1 124
40-44	16,3	9,8	14,2	59,7	100,0	774
45-49	17,1	10,1	14,3	58,5	100,0	414
Residence						
Urban	18,6	5,4	21,0	55,0	100,0	3 904
Rural	6,5	13,7	6,9	73,0	100,0	3 557
Region						
Central	9,5	8,5	13,1	69,0	100,0	2 576
East	10,6	10,8	10,0	68,6	100,0	678
West	9,8	14,6	6,7	69,0	100,0	1 569
South	10,2	10,6	12,6	66,7	100,0	462
Ulaanbaatar	20,3	5,9	22,8	51,0	100,0	2 176
Highest Education Level						
Primary or Less	3,3	11,1	3,4	82,2	100,0	813
Incomplete Secondary	8,7	10,0	9,3	72,0	100,0	1 835
Complete Secondary	14,0	9,4	17,5	59,1	100,0	2 215
More than Secondary	17,7	8,3	18,4	55,6	100,0	2 598
All Women	**12,8**	**9,4**	**14,3**	**63,5**	**100,0**	**7 461**
All Husbands	**10,6**	**7,1**	**15,6**	**66,7**	**100,0**	**1 557**

Use of Contraception

This section presents information on ever-use and current use of contraception. Table 4.04 presents the percentages of all women and currently married women who have ever used any contraceptive method by specific methods, and by age. Nearly 66 percent of all women reported that they had ever used any contraceptive method; therefore 34 percent never used any contraceptive. (Note that totals in this table will sum to more than 100 percent, since many women have used more than one method).

The RHS shows that women are more likely to have used modern contraceptive methods (56 percent) than traditional methods (42 percent), and among the modern contraceptive methods they are more likely to have used the IUD. The level of ever-use of the IUD reaches 61 percent for women aged 30-39. Of the traditional methods, 54 percent of all women aged 30-44 reported that they had used periodic abstinence.

The percentage of ever-use of family planning is greater for currently married women than for all women. Among the currently married women 84 percent have used contraceptive methods, and only 16 percent have never used. The relationship with age is that of an inverted U, reaching a maximum of 91 percent at age 30-34. The highest ever-use of IUD was reported for women aged 35-39 (65 percent). Of the traditional methods, the ever use of periodic abstinence appears to be highest among women aged 30-44, reaching about 55 percent.

Of the modern methods, very few women reported ever use of female sterilization. The survey also shows that male sterilization is practically nonexistent in Mongolia.

Table 4.05 presents current use of contraception among all women and currently married women by specific contraceptive method currently used, by age of women. Women who use a combination of methods, eg. pill with condom, are classified as using the contraceptively more efficient (in this case, the pill). About 44 percent of all women are using any method of contraception, of which 33 percent are using a modern contraceptive method, 10 percent are using a traditional method, and 1 percent are using some other method. Currently, the IUD (23 percent) from among the modern methods and periodic abstinence (10 percent) from the traditional methods are by far the most common methods. These two methods were also the most common methods when ever-use of contraception was examined. Therefore, it can be concluded that Mongolian women continue to use these two methods as the main agents for controlling fertility.

Current use of both modern and traditional methods differs by age of women. The level of current use of contraception is lower for women aged 15-19, and 20-24, reflecting the fact that many of these women have not yet married.(See Figure 4.2.) Table 4.05 also shows that the level of current use of contraception is greater for currently married women compared with that for all women. For example, 44 percent of all women reported that they use a method of contraception while 60 percent of currently married women reported the same.

One half of all husbands reported that they currently use a method of contraception. The 10 percent difference in reported usage of contraceptives by married women and husbands is curious. Men show a deficit of over 4 percent in reported usage of the IUD, an equal deficit in periodic abstinence, and a 1 percent deficit in reporting female sterilization. We can only speculate as to whether women are using these contraceptive methods without their husbands' knowledge, or whether the husbands are simply forgetful.

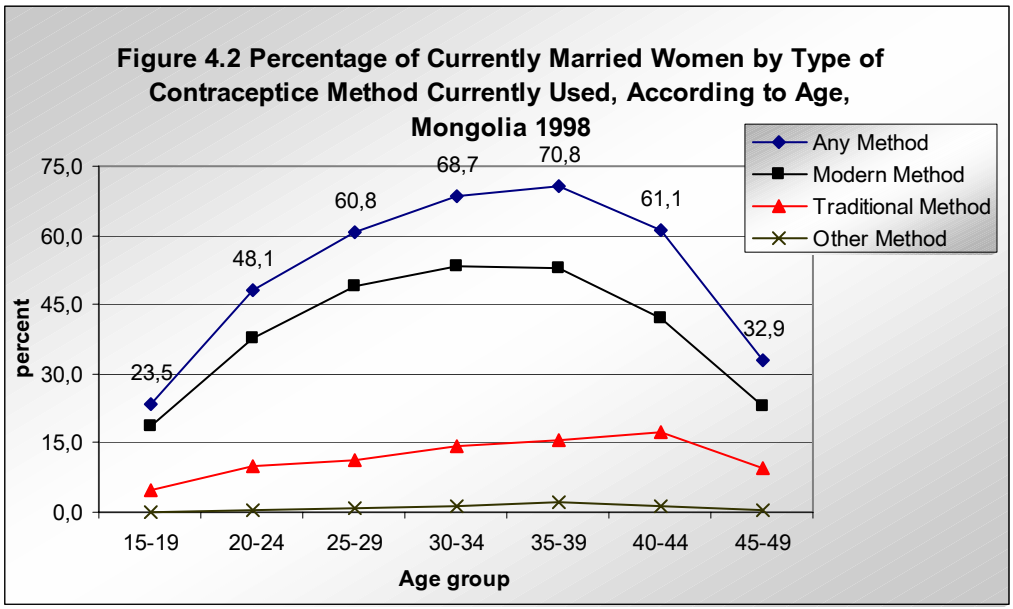
Table 4.04 Percentage of All Women and of Currently Married Women Who Have Ever Used Any Contraceptive Method, by Specific Method and Age, Mongolia 1998

Age group	Used Any Method	Used Any Modern Method	Modern Method								Used Any Traditional Method	Traditional Methods		Used Other Methods	Number of Women
			Pills	IUD	Injec-tions	Norplant/ Implant	Diaph./ Foam/Jelly	Condom	Female Sterilizat.	Male Sterilizat.		Period. Abstinence	Withd-rawal		
All Women															
15-19	6,3	4,0	1,2	1,1	0,3	0,0	0,1	2,3	0,0	0,0	3,8	3,2	1,4	0,2	1 273
20-24	53,5	43,1	11,5	22,9	4,3	0,1	0,6	20,6	0,3	0,0	32,2	27,4	14,7	3,0	1 343
25-29	81,1	70,7	20,4	50,0	7,5	0,1	1,3	31,3	1,3	0,1	51,7	47,5	17,4	7,2	1 351
30-34	88,7	79,7	25,3	61,0	8,6	0,4	2,5	32,5	2,4	0,0	56,6	53,9	17,8	9,0	1 182
35-39	87,2	76,9	21,0	61,2	7,7	0,4	3,1	30,2	3,6	0,0	55,9	53,6	13,3	10,7	1 124
40-44	84,8	71,1	19,4	55,7	5,4	0,4	5,2	23,0	4,5	0,1	56,2	54,4	10,6	10,5	774
45-49	79,7	64,5	11,1	55,8	2,2	0,5	4,6	15,5	2,7	0,0	49,3	47,1	9,7	10,1	414
Total	**65,8**	**56,4**	**15,8**	**41,1**	**5,4**	**0,2**	**2,0**	**22,7**	**1,8**	**0,0**	**41,8**	**38,9**	**12,5**	**6,5**	**7 461**
Currently Married Women															
15-19	37,6	34,1	11,8	12,9	3,5	0,0	0,0	17,6	0,0	0,0	16,5	10,6	8,2	1,2	85
20-24	72,1	60,2	18,0	35,1	6,8	0,1	0,8	26,5	0,4	0,0	42,4	36,4	19,6	4,2	767
25-29	85,9	76,7	22,6	56,3	8,4	0,1	1,4	32,9	1,4	0,1	54,1	49,8	18,6	7,6	1 110
30-34	90,9	82,2	26,3	64,3	9,2	0,5	2,4	33,3	2,6	0,0	57,7	55,0	18,6	9,9	1 010
35-39	89,3	79,7	22,6	65,1	7,9	0,5	3,0	31,8	3,3	0,0	56,6	54,5	13,5	10,4	957
40-44	85,9	72,4	20,4	56,7	5,7	0,3	5,1	24,0	5,1	0,2	57,5	55,8	10,4	9,8	633
45-49	79,8	66,8	12,8	57,6	2,1	0,6	5,6	16,0	2,4	0,0	49,6	47,5	10,1	9,8	337
Total	**84,2**	**73,9**	**21,5**	**55,7**	**7,3**	**0,3**	**2,6**	**29,2**	**2,4**	**0,0**	**53,0**	**49,6**	**15,9**	**8,4**	**4 899**

Note: Totals add to more than 100% because women may have used more than 1 method.

Table 4.05 Percent Distribution of All Women and of Currently Married Women by Specific Contraceptice Method Currently Used, According to Age, and Summary Information for Husbands, Mongolia 1998

Age group	Using Any Method	Using Any Modern Method	Modern Method							Using Any Traditional Method	Traditional Method		Using Other Methods	Not Currently Using	Total	Number of Cases
			Pills	IUD	Injec-tions	Norplant/ Implant	Diaph./ Foam/Jelly	Condom	Female Sterilizat.		Period. Abstinence	Withd-rawal				
All Women																
15-19	3,9	2,1	0,4	1,0	0,2	0,0	0,0	0,5	0,0	1,8	1,7	0,1	0,0	96,1	100,0	1 273
20-24	33,3	25,3	3,1	16,6	2,2	0,1	0,0	3,1	0,3	7,7	6,6	1,0	0,3	66,7	100,0	1 343
25-29	55,2	43,8	4,3	32,1	2,6	0,1	0,1	3,3	1,3	10,7	10,1	0,6	0,7	44,8	100,0	1 351
30-34	64,2	49,1	4,7	33,9	3,7	0,3	0,1	4,0	2,4	14,1	13,6	0,5	1,0	35,8	100,0	1 182
35-39	66,5	50,4	3,7	35,3	3,6	0,4	0,0	3,8	3,6	14,4	13,8	0,6	1,7	33,5	100,0	1 124
40-44	55,4	38,9	2,3	27,1	2,1	0,1	0,1	2,6	4,5	15,0	14,7	0,3	1,6	44,6	100,0	774
45-49	29,0	20,8	1,4	15,0	0,5	0,0	0,0	1,2	2,7	8,0	7,5	0,5	0,2	71,0	100,0	414
Total	**44,2**	**33,4**	**3,0**	**23,3**	**2,3**	**0,1**	**0,0**	**2,8**	**1,8**	**10,0**	**9,5**	**0,5**	**0,8**	**55,8**	**100,0**	**7 461**
Currently Married Women																
15-19	23,5	18,8	2,4	11,8	1,2	0,0	0,0	3,5	0,0	4,7	4,7	0,0	0,0	76,5	100,0	85
20-24	48,1	37,8	4,6	25,3	3,7	0,1	0,0	3,8	0,4	9,8	8,5	1,3	0,5	51,9	100,0	767
25-29	60,8	48,8	5,0	36,3	2,8	0,1	0,1	3,2	1,4	11,3	10,5	0,7	0,7	39,2	100,0	1110
30-34	68,7	53,2	5,1	36,6	3,9	0,4	0,1	4,5	2,6	14,4	13,9	0,5	1,2	31,3	100,0	1010
35-39	70,8	53,1	4,0	37,7	3,9	0,4	0,0	3,8	3,3	15,8	15,2	0,6	2,0	29,2	100,0	957
40-44	61,1	42,2	2,7	28,9	2,2	0,2	0,2	3,0	5,1	17,5	17,2	0,3	1,4	38,9	100,0	633
45-49	32,9	23,1	1,8	16,9	0,6	0,0	0,0	1,5	2,4	9,5	8,9	0,6	0,3	67,1	100,0	337
Total	**59,9**	**45,7**	**4,2**	**32,2**	**3,1**	**0,2**	**0,1**	**3,5**	**2,4**	**13,1**	**12,5**	**0,7**	**1,1**	**40,1**	**100,0**	**4899**
All Husbands	**49,5**	**40,2**	**3,5**	**27,6**	**2,9**	**0,2**	**0,1**	**4,6**	**1,3**	**8,7**	**8,2**	**0,5**	**0,5**	**50,5**	**100,0**	**1557**



The figures on current use of contraceptive methods for currently married women by residence, region, educational level and by number of living children are presented in Table 4.06. Looking at overall figures, in general the women who are least likely to use contraception live in the West and South regions, have less than a grade 9 education, and have fewer than 2 children.

In urban areas 62 percent of currently married women stated that they are using a method, out of which 44 percent stated any modern method, 16 percent stated any traditional method, and 2 percent stated that they are using other methods. The survey shows that currently married women living in rural areas are more likely to use modern contraceptive methods compared with those living in urban areas. On the other hand, currently married urban women are much more likely to use periodic abstinence, particularly those living in Ulaanbaatar.

The differentials by region show that currently married women living in the East region have the highest use of modern contraceptive methods (49 percent) while the women living in Ulaanbaatar have the highest use of traditional contraceptive methods (18 percent). The lowest level of use of modern contraceptive methods was found for currently married women in Ulaanbaatar (44 percent) and the lowest level of use of traditional methods was found for currently married women in West and South regions (9 percent).

The differentials by educational level show that currently married women with higher education have the highest level of use of contraceptive methods. Only 46 percent of currently married women with primary education or less reported that they currently use a contraceptive method, while two-thirds of currently married women with vocational and higher education reported the same. Currently married women with two or three children stated greater use of a contraceptive method (68 percent), in comparison with women of either higher or lower parity.

Table 4.06 Percent Distribution of Currently Married Women by Contraceptive Method Currently Used, According to Selected Background Characteristics, Mongolia 1998

Background Characteristics	Using Any Method	Using Any Modern Method	Modern Method							Using Any Traditional Method	Traditional Method		Using Other Methods	Not Currently Using	Total	Number of Women
			Pills	IUD	Injec-tions	Norplant/ Implant	Diaph./ Foam/Jelly	Condom	Female Sterilizat.		Period. Abstinence	Withd-rawal				
Residence																
Urban	62,0	43,9	5,3	28,3	2,8	0,2	0,1	4,4	2,8	16,1	15,4	0,7	2,0	38,0	100,0	2 384
Rural	57,9	47,4	3,2	35,9	3,4	0,3	0,0	2,6	2,0	10,3	9,7	0,6	0,2	42,1	100,0	2 515
Region																
Central	60,6	46,9	4,0	34,9	3,3	0,3	0,1	2,2	2,2	12,5	11,9	0,6	1,2	39,4	100,0	1 717
East	63,9	49,0	4,0	32,9	4,7	0,2	0,0	3,4	3,8	14,6	13,8	0,8	0,2	36,1	100,0	471
West	53,1	44,3	2,6	32,4	2,9	0,1	0,0	4,2	2,1	8,7	8,1	0,7	0,1	46,9	100,0	1 075
South	55,8	46,0	4,8	30,4	3,9	0,3	0,0	3,9	2,7	9,3	9,3	0,0	0,6	44,2	100,0	335
Ulaanbaatar	64,2	44,0	5,8	28,7	2,3	0,2	0,2	4,7	2,2	18,1	17,1	0,9	2,2	35,8	100,0	1 301
Highest Education Level																
Primary or Less	45,7	41,9	1,7	32,8	3,0	0,5	0,0	1,7	2,2	3,0	2,7	0,2	0,7	54,3	100,0	403
Incomplete Secondary	51,2	43,9	3,6	32,0	3,6	0,2	0,0	2,3	2,2	6,8	6,6	0,3	0,5	48,8	100,0	1 052
Complete Secondary	60,2	46,7	4,7	31,8	3,3	0,4	0,0	4,0	2,5	12,6	11,5	1,1	1,0	39,8	100,0	1 335
More than Secondary	66,7	46,7	4,6	32,5	2,8	0,1	0,1	4,1	2,4	18,5	17,9	0,7	1,5	33,3	100,0	2 109
Number of Living Children																
None	15,4	9,8	0,9	3,3	0,9	0,0	0,0	2,8	1,9	5,6	4,7	0,9	0,0	84,6	100,0	214
1	52,5	37,8	5,0	25,3	2,9	0,1	0,0	3,8	0,8	13,3	12,2	1,1	1,4	47,5	100,0	986
2	68,1	51,8	5,2	37,2	2,7	0,3	0,1	4,0	2,3	15,2	14,5	0,7	1,1	31,9	100,0	1 375
3	67,7	51,3	4,8	36,1	4,0	0,0	0,1	3,6	2,7	15,4	15,0	0,4	1,0	32,3	100,0	961
4+	58,4	46,9	2,7	34,0	3,4	0,4	0,1	2,9	3,4	10,5	10,0	0,5	1,0	41,6	100,0	1 363
Total	**59,9**	**45,7**	**4,2**	**32,2**	**3,1**	**0,2**	**0,1**	**3,5**	**2,4**	**13,1**	**12,5**	**0,7**	**1,1**	**40,1**	**100,0**	**4 899**

The current use of modern contraceptive methods differs less that the current use of traditional methods for given background characteristics. For example, the level of current use of traditional methods is 3 percent for currently married women with primary education, while it is nearly 19 percent for currently married women with vocational and higher education. The effective use of periodic abstinence presupposes a certain level of literacy and numeracy among users.

Table 4.07 shows the age and number of children of ever-married women at time of first use of contraception. Over 16 percent of ever-married women reported that they never used any contraceptive method. Among ever-married women who have ever used a contraceptive method, 20 percent used a contraception method for the first time when they had three or more children, 45 percent first used when they had one or two children, and 19 percent first used before the first child. This pattern differs by age group of women. For example, the percentage of ever-married women who had one child at time of first use is greater for women aged 20-34. The number of children at time of first use of contraception has decreased over time. For example, women aged 45-49 had a median of 2,4 children, while women aged 35-39 had only 1,4 children at time of first use of contraception. Likewise, the percentage of women starting use of contraception before the birth of the first child has increased over time: from under 10 percent for women now in their forties to 30 percent of women now of age 20-24. Clearly, Mongolian women now start to regulate their childbearing at younger ages and lower parities.

Table 4.07 Percent Distribution of Ever-Married Women by Number of Living Children at Time of First Use of Contraception and Median Number of Children at First Use, According to Current Age, Mongolia 1998

Age group	Never Used	Number of Living Children at Time of First Use					Total	Number of Women	Median Number of Children at First Use
		0	1	2	3	4+			
15-19	61,7	22,3	16,0	0,0	0,0	0,0	100,0	94	0,0
20-24	28,0	29,9	33,8	7,3	1,0	0,0	100,0	810	0,2
25-29	14,5	26,4	36,1	17,9	4,2	0,8	100,0	1204	0,5
30-34	10,0	17,8	30,8	20,8	13,5	7,2	100,0	1125	0,9
35-39	11,8	13,3	22,7	21,0	12,0	19,2	100,0	1079	1,4
40-44	14,7	9,0	19,4	18,1	11,8	27,1	100,0	757	1,8
45-49	20,2	7,8	14,9	13,9	9,3	33,9	100,0	410	2,4
Total	**16,3**	**18,7**	**27,8**	**17,0**	**8,5**	**11,7**	**100,0**	**5479**	**0,8**

Table 4.08 shows the percentage distribution of women by knowledge of the fertile period during the ovulatory cycle for all women and periodic abstinence users. In the RHS, the question on when a woman was most likely to become pregnant during the ovulatory cycle was asked of all women, not only of periodic abstinence users. Most of the abstinence users, or 90 percent of them, reported the correct answer, which is the middle of the ovulatory cycle. But only 54 percent of all women reported the correct answer for the most fertile period, while 37 percent said they did not know, and 9 percent gave a wrong answer.

Table 4.08 Percent Distribution of Women by Knowledge of the Fertile Period During the Ovulatory Cycle, for All Women and Periodic Abstinence Users, Mongolia 1998

Knowledge of Ovulatory Cycle	Users of Periodic Abstinence	All Women
At Any Time	0,3	0,6
After Period Ended	2,7	5,8
Middle of the Cycle	89,7	54,2
Before Period Begins	1,6	2,5
DK	5,8	36,8
Total	**100,0**	**100,0**
Number	709	7 399

Note: Table excludes young women who have not yet menstruated.

In the RHS fewer than 2 percent of women reported that they were sterilized. Table 4.09 gives age at time of sterilization of these women by years since the operation. Among these women, 10 percent were sterilized at under the age of 25 years, 60 percent were in the age range of 25-34 years, and 30 percent were of the age of 35-44 years. According to Table 4.09, the percentage of sterilized women under the age of 25 years has been decreasing over time. The median age of sterilized women in years before 1992 was around 30 years, but has increased to around 32-33 years for women who were sterilized in the last 5 years.

Table 4.09 Percent Distribution of Sterilized Women by Age at the Time of Sterilization, According to the Number of Years Since the Operation, Mongolia 1998

Years Since Operation	Age at Time of Operation					Number of		Median Age
	<25	25-29	30-34	35-39	40-44	Total	Women	(at Time of Sterilization)
<2	6,0	30,0	28,0	24,0	12,0	100,0	50	31,6
2-5	9,8	14,6	39,0	24,4	12,2	100,0	41	32,7
6+	15,6	33,3	33,3	13,3	4,4	100,0	45	29,9
Total	**10,3**	**26,5**	**33,1**	**20,6**	**9,6**	**100,0**	**136**	**31,5**

In any country the system of family planning services has an important role. With the purpose to determine the sources of supply of modern contraceptive methods, the question on places where the users obtain contraceptive methods was asked.

Table 4.10 shows that 76 percent of current users of modern contraceptive methods obtain their methods at a public hospital, while 16 percent obtain them at pharmacies. All sterilized women had their operations in public hospitals. The table also shows that 54 percent of current users of modern contraceptive methods received the methods without any fee, while 31 of them purchased the method. Users are more likely to buy pills and condoms, while they are more likely to obtain the IUD and injections without any fee. From a social marketing standpoint, it is important to note that 43 percent of pill users purchase their supply from pharmacies; furthermore, 54

percent of condom users purchase them from pharmacies, and an additional 5 percent purchase them in other shops.

Table 4.10 Percent Distribution of Current Users of Modern Contraceptive Methods by Most Recent Source of Supply, According to Specific Method, and Whether There Was a Cost Involved, Mongolia 1998

	Method					
	Pills	IUD	Injections	Condom	Female Sterilization	Total
Source of Current Method						
Public Hospital	52,4	80,7	89,3	33,0	100,0	75,8
Private Hospital	1,8	4,6	2,4	0,5	0,0	3,6
Pharmacy	43,1	10,2	4,7	54,1	0,0	15,9
Tradit. Doctor	0,0	0,1	0,0	0,0	0,0	0,0
Shop	0,0	0,2	0,0	4,8	0,0	0,6
Friends	1,8	2,6	3,6	4,3	0,0	2,6
Parents/Relativ	0,4	1,3	0,0	0,5	0,0	1,0
Other	0,4	0,3	0,0	2,9	0,0	0,6
Cost						
Purchase	52,9	27,3	17,8	63,6	1,5	30,6
Service Fee	0,0	18,2	20,1	0,0	15,4	15,1
No Fee	47,1	54,5	62,1	36,4	83,1	54,3
Total	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Number of women	225	1740	169	209	136	2493

Note: The total column includes some methods not shown separetely.

Intentions to Use Family Planning in the Future

Table 4.11 shows the percentage distribution of currently married women who are not currently using any contraceptive method by intention to use in the future according to the number of living children. The RHS shows that 57 percent of currently married women who are not currently using any contraceptive method have an intention to use in the future, including 20 percent who had never used and 37 percent who had previously used contraception. According to the table, most of the currently married women who are not currently using any contraceptive method and who have one to three living children have an intention to use contraception in the future.

The pattern of intention to use contraception is different for married men who are not currently using any contraceptive method. Among the men who are not currently using any contraceptive method, the percentages who intend and do not intend to use are almost the same. The intention to use contraception in the future is higher for currently married women than for currently married men—57 percent of married women against 46 percent of husbands.

Table 4.11 Percent Distribution of Currently Married Women Who Are Not Currently Using Any Contraceptive Method by Intention to Use in the Future, According to Number of Living Children and Whether Ever Used Contraception, and Husbands' Summary Information, Mongolia 1998

Intention	Number of Living Children					All Women	Husbands
	0	1	2	3	4+		
Never Used Contraception							
Intends to Use	23,9	33,0	22,6	13,6	10,4	19,8	31,3
Does Not Intend	51,1	17,7	11,8	13,1	19,7	17,7	36,0
Unsure about Use	1,1	3,3	1,9	0,9	1,8	2,0	6,4
Previously Used Contraception							
Intends to Use	9,8	30,8	48,1	52,8	29,7	37,5	14,2
Does Not Intend	14,1	13,1	13,9	18,1	37,0	21,5	10,5
Unsure about Use	0,0	2,0	1,7	1,5	1,3	1,5	1,7
Total	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
All Currently Married Non-users							
Intends to Use	33,7	63,9	70,7	66,5	40,1	57,3	45,5
Does Not Intend	65,2	30,8	25,7	31,2	56,7	39,2	46,5
Unsure about Use	1,1	5,3	3,5	2,4	3,2	3,5	8,0
Total	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Number	92	451	482	337	603	1 965	787

Table 4.12 Percent Distribution of Women Who Are Not Using Any Contraceptive Method and Who Do Not Intend to Use in the Future by Main Reason for Not Intending to Use, According to Their Age, Mongolia 1998

Reasons	Age		Total Ages
	Under 30	30 and over	
Not Having Sex	0,6	0,5	0,5
Infrequent Sex	1,2	14,9	12,1
Menopausal/Hysterectomy	2,5	23,6	19,2
Subfecund/Infecund	3,7	8,5	7,5
Postpartum/Breastfeeding	5,0	0,2	1,2
Wants (More) Children	62,1	12,5	22,9
Respondent Opposed	3,1	11,0	9,4
Husband Opposed	1,2	1,5	1,4
Religious Prohibition	0,0	0,8	0,6
Knows No Method	3,1	3,0	3,0
Knows No Source	0,6	0,5	0,5
Health Concerns	8,1	11,0	10,4
Fear of Side Effects	5,6	2,6	3,2
Lack of Access/Too Far	0,0	2,0	1,6
Cost Too Much	0,0	0,2	0,1
Inconvenient to Use	1,2	1,6	1,6
Other	1,9	5,3	4,5
DK	0,0	0,3	0,3
Total	**100,0**	**100,0**	**100,0**
Number of Women	161	609	770

According to Table 4.12, among the women who are not currently using any contraceptive method and who do not intend to use, when asked why they do not intend to use, 23 percent said they want more children, while 19 percent responded that they are unable to conceive because of menopause or hysterectomy, and nearly 8 percent claim to have a fecundity impairment. But 14 percent of these women

reported that they have health concerns and fear of side effects as reasons for not intending to use.

For women aged 30 years and more, the percentages given for non-use of contraception are greater for reasons like menopausal/hysterectomy, infrequent sex, and opposed to use of contraception compared with women under 30. On the other hand, nearly two thirds of the women aged less than 30 years do not intend to use contraceptives because they want more children.

Among currently married women who are not currently using a contraceptive method but who intend to use in the future, Table 4.13 shows that most, namely, two thirds of the women aged under 30 years and 55 percent of women aged over 30 years choose to use the IUD in the future. The next most preferred method is periodic abstinence. In general, the IUD and periodic abstinence appear to be the most preferred methods in terms of past, current and future intended use of contraception of Mongolian women.

Table 4.13 Percent Distribution of Currently Married Women Who Are Not Using a Contraceptive Method but Who Intend to Use in the Future by Preferred Method, According to Their Age, Mongolia 1998

Method	Age		
	Under 30	30 and over	Total Ages
Pills	10,0	9,5	9,8
IUD	65,4	55,1	61,5
Injections	6,8	9,0	7,6
Implant/Norplant	2,1	2,1	2,1
Diaphragm/Foam/Jelly	0,0	0,2	0,1
Condom	3,1	2,8	3,0
Female Sterilization	0,6	0,7	0,6
Periodic Abstinence	9,1	18,4	12,6
Withdrawal	0,1	0,0	0,1
Other	0,3	0,7	0,4
DK	2,4	1,4	2,0
Total	**100,0**	**100,0**	**100,0**
Number of Women	703	423	1 126

Table 4.14 shows comparisons of attitudes of approval of family planning of husbands and wives. Over 79 percent of husbands, and 92 percent of their spouses approve of family planning methods. In the case of 76 percent of couples, both spouses approve of family planning. As was seen earlier in plans for future use, husbands are somewhat less favorable about family planning than their wives.

Table 4.14 Percent Distribution of Couples by Approval of Family Planning, Mongolia, 1998

Husband's Attitude	Wife's Attitude			
	Approve	Disapprove	Don't Know	Total
Approve	75,8	2,8	0,8	79,4
Disapprove	12,4	2,2	0,8	15,4
Don't Know	4,0	0,4	0,8	5,1
Missing	0,1	0,0	0,0	0,1
Total	**92,2**	**5,4**	**2,4**	**100,0**
Number	-	-	-	1 557

Summary

In Chapter 3 it was seen that fertility in Mongolia has declined dramatically over the past 20 years, but that there are wide differences in fertility across the country. Chapter 4 has shown that part of the explanation is the use of contraception. The fact that 60 percent of currently married women are using a method of contraception must have an impact on fertility. It is no coincidence that where the use of contraception is highest, i.e. in urban areas and among women who have completed secondary education, fertility is lowest. The inverse is also true. Where fertility is highest, as in rural areas, in West and South regions, and among women who have not completed secondary education, the use of contraception is lowest.

It seems likely that the use of contraception will grow in the future. Among 76 percent of married couples, both spouses say they approve of the use of family planning; and among married women who are not now using a contraceptive method, over one-half intend to use in the future.

CHAPTER V

OTHER PROXIMATE DETERMINANTS OF FERTILITY

Badrakh Tsendjav and Albert M. Marckwardt

In Chapter 3, it was shown that fertility levels vary according to conditions such as urban-rural residence, region, and level of education. But these conditions, or variables, can only affect fertility indirectly through their influence on the more immediate, or "proximate", determinants of fertility. These include age of entry into marital unions, frequency of sexual intercourse, the duration of postpartum insusceptibility, and the onset of menopause; other proximate determinants are the use of contraception, the subject of Chapter 4, and induced abortion, treated in Chapter 11. Obtaining information on marital status, age at first marriage, sexual activity of women, and menopause in the RHS was important because these help to determine women's risk of becoming pregnant, and hence, fertility levels. These phenomena are the subject of this chapter.

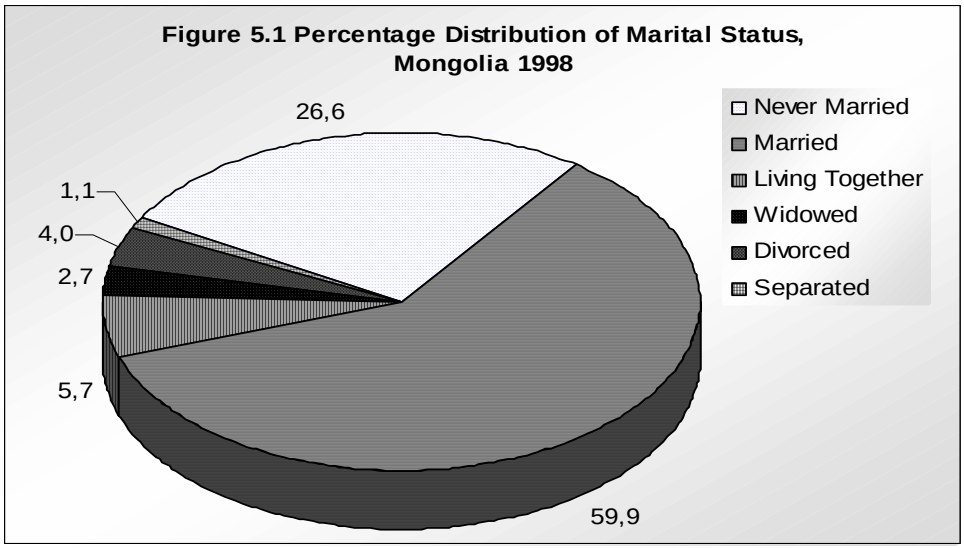
Marital Status

Of the RHS sample of women of ages 15 to 49 years of age, 27 percent were never married, 60 percent were married, 6 percent were living together (cohabiting), and 8 percent were widowed, divorced or separated. The pattern of the marital status of women according to age can be seen in Table 5.01.

Table 5.01 Percent Distribution of Women by Current Marital Status, According to Age, Mongolia 1998

Background Characteristics	Current marrital status						Total	Number of Women
	Never Married	Married	Living Together	Widowed	Divorced	Separated		
Age								
15-19	92,6	3,9	2,7	0,0	0,4	0,3	100,0	1 273
20-24	39,7	44,5	12,7	0,2	2,0	1,0	100,0	1 343
25-29	10,9	74,4	7,8	1,0	4,7	1,2	100,0	1 351
30-34	4,8	78,7	6,8	2,6	5,7	1,4	100,0	1 182
35-39	4,0	82,6	2,6	2,1	6,5	2,2	100,0	1 124
40-44	2,2	80,9	0,9	8,8	6,6	0,6	100,0	774
45-49	1,0	80,9	0,5	14,5	2,2	1,0	100,0	414
Total	**26,6**	**59,9**	**5,7**	**2,7**	**4,0**	**1,1**	**100,0**	**7 461**

In 1998, about 93 percent of young women aged 15-19 had never married and were not cohabiting; this figure decreases to 40 percent for women aged 20-24. This suggests that women normally marry at ages 20-24. Note that throughout this report when the term "currently married women" is used in the text and tables, it includes both women who are formally married and those who are "living together" with a partner. It can be seen that only 1 percent of the women 45-49 had never married. Thus, marriage is nearly universal in Mongolia. The survey shows that divorce and separation are not very common (4 percent of women are divorced and 1 percent are separated). Starting from the age of 40, the percentage of widowed women increases rapidly, and almost 15 percent of women aged 45-49 are widowed.



Age at First Marriage

The age at first marriage of women decreases or increases for different periods of socio-economic development of any country, and as educational and employment opportunities for women and men change. Table 5.02 shows the changes in age at first marriage of Mongolian women. Women who are now 45-49 years of age were married at earlier ages than their younger counterparts. Thus, 48 percent of women of ages 45-49 years first married before the age of 20, compared to only 30 percent of those now aged 30-34 years, and 36 percent of women now 25-29. Median age at first marriage is the age at which 50 percent of women in a particular age group first married or began to cohabit (live together). Looking at median age of marriage in the final column of Table 5.02, this increased gradually over time from 20,1 years for those now 45-49 to 21,2 years for those now of ages 30-34 (an increase of slightly over one year), then fell back to 20,8 years for those now of ages 25-29. It is not possible to calculate a median for those now of ages 20-24, since fewer than half of them had married by age 20 (the start of the age interval). But it any case, there was definitely a slight trend to older age at first marriage which emerged about 25 years ago and lasted for about 15 years. It is not clear whether this trend has been reversed or whether it will continue in the future.

Table 5.02 Percentage of Women Ever Married by Specific Exact Ages and Median Age at First Marriage, According to Current Age, Mongolia 1998

Background Characteristics	Exact Age at First Marriage					Never Married	Number	Median
	15	18	20	22	25			
Age								
15-19	0,3	-	-	-	-	92,6	1 273	-
20-24	0,2	10,4	36,7	-	-	39,7	1 343	-
25-29	0,1	8,0	36,0	65,3	84,5	10,9	1 351	20,8
30-34	0,2	8,3	29,8	61,0	85,5	4,8	1 182	21,2
35-39	0,4	11,0	39,7	65,1	85,3	4,0	1 124	20,7
40-44	0,4	17,7	44,8	68,9	90,7	2,2	774	20,4
45-49	1,2	19,6	48,3	75,8	90,6	1,0	414	20,1
25-49	**0,3**	**11,3**	**37,8**	**65,7**	**86,4**	**5,6**	**4 845**	**20,8**

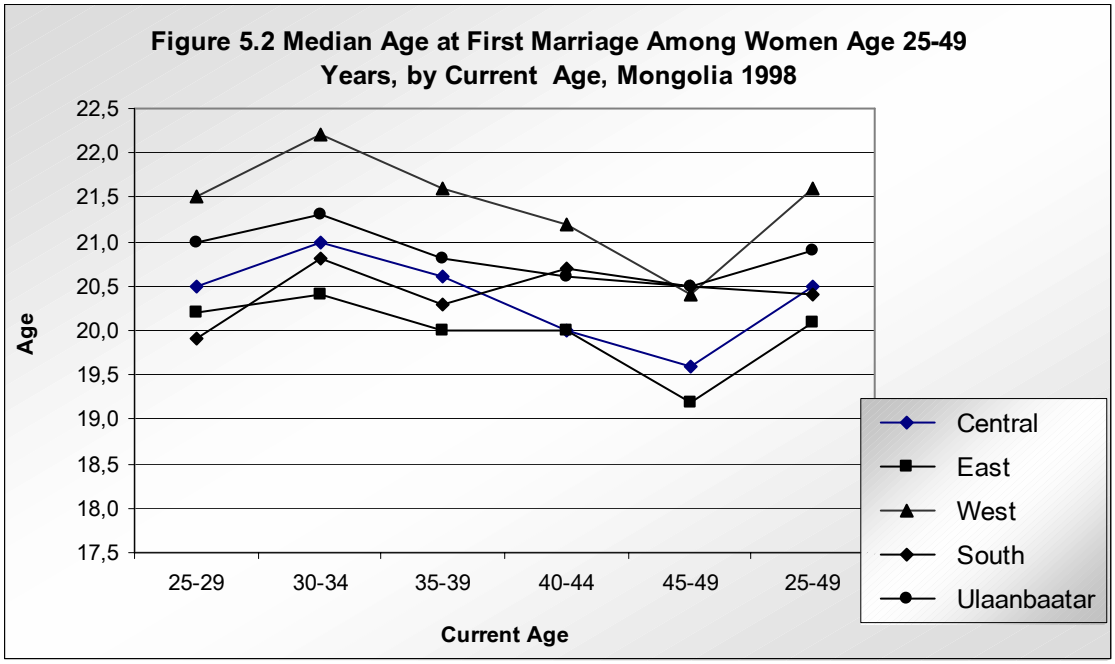
Differentials of Median Age at First Marriage

Table 5.03 shows how median age at first marriage differs by residence, region and educational level of women. Median age at first marriage appears to be almost the same for urban and rural women. It is 20,9 years for urban women aged 25-49 and 20,6 years for rural women of the same age.

Median age at first marriage does not differ very much by region except for West region. Women in the West region marry about a year later than women in other regions. This may be due to the fact this region has a number of different ethnic groups with traditions which differ from those of the rest of the country. Median age at first marriage differs by educational level of women. There is a pattern that less educated women are more likely to marry at earlier ages. Median age at first marriage for women with no education or primary education is nearly 2 years earlier than for women with vocational and higher education.

Table 5.03 Median Age at First Marriage Among Women Age 25-49 years, by Current Age and Selected Background Characteristics, Mongolia, 1998

Background Characteristics	Current Age					
	25-29	30-34	35-39	40-44	45-49	25-49
Residence						
Urban	21,1	21,3	20,9	20,6	20,3	20,9
Rural	20,6	21,2	20,5	20,2	19,7	20,6
Region						
Central	20,5	21,0	20,6	20,0	19,6	20,5
East	20,2	20,4	20,0	20,0	19,2	20,1
West	21,5	22,2	21,6	21,2	20,4	21,6
South	19,9	20,8	20,3	20,7	20,5	20,4
Ulaanbaatar	21,0	21,3	20,8	20,6	20,5	20,9
Highest Education Level						
Primary or Less	19,8	19,9	19,6	19,5	19,4	19,5
Incomplete Secondary	20,0	20,3	19,7	20,1	19,6	20,0
Complete Secondary	20,9	21,3	20,8	19,8	20,4	20,9
More than Secondary	21,0	21,7	21,2	21,0	20,5	21,2
All Women	**20,8**	**21,2**	**20,7**	**20,4**	**20,1**	**20,8**



Recent Sexual Activity of Currently Married Women

A question about the date of last sexual intercourse was asked of women who were currently married or cohabiting. For purposes of this analysis, we define a woman as being sexually active if she last had sexual intercourse at any time in the 4 weeks preceding the date of interview. Table 5.04 shows that over 86 percent of married women were sexually active in the 4 weeks prior to the survey. Looking at age groups, sexual activity does not differ very much by age. Mongolian women are most sexually active up to the ages of 35-39, and then sexual activity decreases slowly from the age of 40. However, almost 13 percent of married women of ages 15-19 were abstaining from sexual intercourse following a birth, as were 8 percent of women of ages 20-24. The percentage of women abstaining from sexual activity for reasons other than a recent birth was almost the same for age groups from 20 to 39 years, and varied between 8 and 9 percent. This abstinence increases with increases in age of women, and almost 24 percent of those aged 45-49 were abstaining from sex for reasons other than a recent birth.

Sexual activity also differs by duration of marriage, following the same pattern as for age. Around 89 percent of women married for 5-20 years were sexually active in the last 4 weeks. It decreases with the increase in age as well as in duration of marriage, and only 76 percent of women married for 30 or more years were sexually active in the 4 weeks prior to the survey. Similarly, the percentage of women who were not sexually active for reasons other than a recent birth is greater at longer duration of marriage. Around 20 percent of women married for 25 or more years were not sexually active for reasons other than postpartum abstinence.

Table 5.04 Percent Distribution of Currently Married Women by Sexual Activity in the 4 Weeks Prior to the Survey and Duration of Abstinence by Whether or Not Postpartum, According to Background Characteristics, Mongolia 1998

Background Characteristics	Active Last 4 Weeks	Not Sexually Active				Total	Number
		P.Part. Abst 0-1 Year	P.Part. Abst 2+ Years	No P.P. Abst 0-1 Year	No P.P. Abst 2+ Years		
Age							
15-19	83,5	12,9	0,0	3,5	0,0	100,0	85
20-24	83,4	8,3	0,0	8,2	0,0	100,0	767
25-29	86,7	4,4	0,1	8,8	0,0	100,0	1 110
30-34	89,3	2,8	0,1	7,7	0,1	100,0	1 010
35-39	89,2	2,0	0,2	8,5	0,1	100,0	957
40-44	84,5	0,5	2,2	12,2	0,6	100,0	633
45-49	74,8	0,0	1,8	22,6	0,9	100,0	337
Marital Duration (in years)							
0-4	81,1	10,1	0,0	8,8	0,0	100,0	1 009
5-9	89,1	2,2	0,2	8,5	0,0	100,0	1 216
10-14	89,4	3,1	0,0	7,4	0,1	100,0	947
15-19	89,4	1,4	0,6	8,5	0,1	100,0	812
20-24	83,9	0,9	1,8	13,0	0,4	100,0	554
25-29	76,5	0,0	1,6	20,3	1,6	100,0	315
30+	76,1	0,0	4,3	19,6	0,0	100,0	46
Residence							
Urban	85,3	3,4	0,4	10,7	0,2	100,0	2 384
Rural	86,8	3,7	0,6	8,7	0,2	100,0	2 515
Region							
Central	86,6	3,0	0,5	9,8	0,1	100,0	1 717
East	89,0	2,1	0,6	8,1	0,2	100,0	471
West	82,0	6,0	0,7	11,0	0,2	100,0	1 075
South	86,6	3,0	0,0	10,4	0,0	100,0	335
Ulaanbaatar	87,5	2,9	0,3	9,0	0,3	100,0	1 301
Highest Education Level							
Primary or Less	81,6	3,7	1,5	12,4	0,7	100,0	403
Incomplete Secondary	84,7	4,2	0,5	10,6	0,0	100,0	1 052
Complete Secondary	85,8	5,2	0,1	8,8	0,1	100,0	1 335
More than Secondary	87,8	2,2	0,5	9,3	0,2	100,0	2 109
Contraceptive Method							
No Method	75,7	8,3	1,0	14,7	0,3	100,0	1 965
Pill	94,2	0,5	0,0	5,3	0,0	100,0	206
IUD	93,5	0,3	0,1	6,0	0,1	100,0	1 578
Sterilization	87,1	2,6	0,9	7,8	1,7	100,0	116
Periodic Abstinence	93,1	0,2	0,2	6,6	0,0	100,0	610
Other	92,0	0,0	0,0	8,0	0,0	100,0	424
Total	**86,1**	**3,6**	**0,5**	**9,7**	**0,2**	**100,0**	**4 899**

Looking at region of residence, the one significant difference is the relatively greater number of women in postpartum abstinence in the West region. This is the region with the highest fertility rate (see Chapter 3), so it is not surprising that more women are abstaining after a recent birth. Sexual activity of married women increases with increase in educational level, which can be explained by age composition: the least educated are older than the better educated. The sexual activity of married women also differs in relation to the use of contraceptives. Well over 90 percent of married women who use a contraceptive engaged in recent sexual intercourse, while about 76 percent of women who were not using a contraceptive method were sexually active. It is a matter of concern as to whether these women who are sexually active but not using a contraceptive method really want to become

pregnant or not, and if not and they do become pregnant, what they will do about it—continue the pregnancy or attempt to abort it. (See Chapter 11 for information concerning induced abortion.)

Postpartum Amenorrhea, Abstinence and Insusceptibility

There are two main proximate determinants of fertility that keep women from becoming pregnant again soon after giving birth. Women cannot conceive if their menstrual period has not resumed after giving birth. This is called postpartum amenorrhea. Similarly, women cannot conceive if they are abstaining from sex after giving birth. This is called postpartum abstinence. Women are insusceptible (not exposed) to the risk of pregnancy if they are either amenorrheic or abstaining, or both. The percentages of births whose mothers are still amenorrheic, abstaining and insusceptible by number of months since birth, in two-month intervals, are shown in Table 5.05. The table includes all births occurring in the 3-year period prior to the survey. Median durations of amenorrhea, abstinence and insusceptibility are also presented.

For all births occurring in the 3-year period prior to the survey, nearly 29 percent of mothers had not resumed menstruation at the time of interview, 16 percent were still abstaining, and 34 percent were still insusceptible. The percentage of women who were insusceptible was around 98 percent within the first 60 days after giving birth, and this percentage steadily decreases with increases in time since birth, reaching 33 percent at 12-13 months, and 8 percent at 24-25 months.

The median duration of amenorrhea is 8 months and the mean is 10 months. Thus, duration of amenorrhea appears to be lengthy for Mongolian women, and it can be explained by the long duration of breastfeeding (see Chapter 9). (In the absence of breatfeeding, postpartum amenorrhea normally lasts for only 2-3 months.) The median duration of abstinence is 2 months and the mean is 6 months. The median duration of insusceptibility is 9 months and mean is 12 months.

The RHS also provides prevalence/incidence mean durations of amenorrhea, abstinence and insusceptibility. The methodology for the calculation of the prevalence/ incidence mean has been borrowed from epidemiology. In epidemiology, the mean duration of an illness can be estimated by dividing its prevalence by its incidence. In this case, the "disease" is postpartum amenorrhea, abstinence or insusceptibility. Prevalence is defined as the number of children whose mothers are amenorrheic, etc. at the time of the survey. Incidence is defined as the average number of births per month. An estimate of the mean is obtained by dividing the number of mothers who are amenorrheic, etc. at the time of the survey by the average number of births per month. The prevalence/incidence mean for amenorrhea is 10 months, abstinence is 6 months and insusceptibility is 12 months. This relatively long period of insusceptibility after giving birth helps to explain the rather lengthy inter-birth intervals encountered in Chapter 3.

Table 5.05 Percentage of Births Whose Mothers are Postpartum Amenorrheic, Abstaining, and Insusceptible, by Number of Months Since Birth, and Median and Mean Durations, Mongolia 1998

Months Since Birth	Postpartum			Number of Births
	Amenorrheic	Abstaining	Insusceptible	
<2	96,5	85,0	98,2	113
2-3	78,8	45,0	85,6	160
4-5	68,8	19,1	73,4	173
6-7	55,6	20,3	63,4	153
8-9	46,2	20,9	51,6	91
10-11	37,6	12,0	43,6	133
12-13	27,2	8,8	32,5	114
14-15	15,3	12,9	25,8	124
16-17	18,2	9,1	25,0	132
18-19	12,0	12,0	20,0	125
20-21	7,3	5,5	10,1	109
22-23	4,8	6,7	10,5	105
24-25	3,1	4,6	7,7	130
26-27	0,0	4,0	4,0	126
28-29	1,7	1,7	3,4	116
30-31	2,3	5,5	7,8	128
32-33	0,9	6,0	6,8	117
34-35	2,8	2,8	5,5	109
Total	**28,6**	**16,1**	**34,1**	**2 258**
Median	8,0	2,3	9,1	-
Mean	9,8	6,0	11,8	-
Prev/Incidence Mean	10,2	5,7	12,1	-

Median Duration of Insusceptibility by Background Characteristics

Table 5.06 presents the median duration of amenorrhea, abstinence and insusceptibility by age, residence, region and educational level. The median duration of insusceptibility is almost 2 months longer for women of 30 or more years of age than for younger women, due primarily to their longer periods of amenorrhea. Median duration of insusceptibility for rural women is longer by about 1 month than for urban women; median duration of abstinence is a little shorter for rural women while the median duration of amenorrhea is somewhat longer.

Looking at region of residence, median durations of amenorrhea, abstinence and insusceptibility are all greater for West region than for the rest of the country. Once again, this may be due to the various ethnic traditions which characterize the region. There appears to be no association between level of education and the duration of either amenorrhea or abstinence.

Table 5.06 Median Number of Months of Postpartum Amenorrhea, Postpartum Abstinence, and Postpartum Insusceptibility, by Selected Background Characteristics, Mongolia 1998

Background Characteristics	Postpartum			Number of Births
	Amenorrheic	Abstaining	Insusceptible	
Age				
<30	7,6	2,4	8,8	1 572
30+	9,1	1,9	10,5	686
Residence				
Urban	7,7	2,5	8,5	897
Rural	8,4	2,2	9,4	1 361
Region				
Central	7,5	2,1	9,1	832
East	7,2	1,9	7,3	196
West	9,3	2,4	10,2	618
South	7,0	2,0	8,3	168
Ulaanbaatar	7,8	2,6	8,1	444
Highest Education Level				
Primary or Less	8,0	3,5	9,2	160
Incomplete Secondary	7,3	2,2	8,9	624
Complete Secondary	9,0	2,6	9,8	732
More than Secondary	7,7	2,1	8,4	742
Total	**8,0**	**2,3**	**9,1**	**2 258**

Menopause

Even if the menopause is an inevitable biological phenomenon, the age at onset can vary between women because of health, age at first and last birth, and the total number of births they have borne. Logically, the percentage of women in menopause increases with increasing age. As can be seen in Table 5.07, less than 1 percent of women aged 30-34 were in menopause, and only 2 percent of women of ages 40-41 were menopausal. Thereafter it increases rapidly, and reaches 49 percent of women aged 48-49 years. In other words, half of Mongolian women who reach the age of 50 years have already experienced menopause.

Table 5.07 Menopause for Women 30-49 Years of Age, by Age, Mongolia 1998

Respondent's Age	Exposure	
	Menopause %	Number of Women
30-34	0,3	1 182
35-39	1,0	1 124
40-41	1,7	344
42-43	5,9	306
44-45	11,5	217
46-47	24,0	179
48-49	49,3	142
Total	**5,1**	**3 494**

Summary

In this chapter some of the determinants of fertility, other than contraception and abortion, have been examined. It has been shown that marriage is nearly universal. The median age at marriage of women is relatively young: about 21 years. A factor which definitely has a bearing on fertility is the relatively lengthy period of postpartum amenorrhea following the birth of a child. The median duration of amenorrhea is 8 months. As will be seen in Chapter 9, this is in part due to extended breastfeeding.

CHAPTER VI

FERTILITY PREFERENCES

Ariunaa Dashtseren and Albert M. Marckwardt

This chapter addresses themes that allow an assessment of the need for contraception. The themes include married women's preferences for future childbearing, preferred timing for a future birth, fertility preferences in relation to contraceptive use, their ideal number of children, and wanted and unwanted fertility. This will permit an assessment of the National Reproductive Health Program's success in assuring women that they have the number of children they want, and that they avoid having mistimed or unwanted pregnancies.

Desired Number of Children

Table 6.01 presents the percent distribution of currently married women by desire for children according to number of living children, including current pregnancy. For purposes of this chapter, if a woman has had 2 children but is currently pregnant, she is classified as having 3 children. This is because the question put to pregnant women on desire for more children was introduced with the phrase "After the child you are expecting…" Exactly 15 percent of currently married women desire to have a child within two years ("soon"), another 15 percent want to delay their next birth for two or more years ("later"), while 62 percent want no more children.

Table 6.01 Percent Distribution of Currently Married Women by Desire for Children, According to Number of Living Children, Mongolia 1998

Desire For More Children	Living Children (Including Current Pregnancy)							
	0	1	2	3	4	5	6+	Total
Wants Another Soon	74,4	35,0	14,7	7,9	2,1	1,6	0,0	15,0
Wants Another Later	7,2	43,7	18,1	5,1	0,7	0,3	0,0	15,2
Wants, Unsure Timing	5,6	2,1	0,7	0,3	0,0	0,0	0,5	0,9
Undecided	1,6	3,9	5,6	3,8	1,5	0,5	0,7	3,5
Wants No More	5,6	13,9	58,0	79,6	92,4	91,5	93,3	62,1
Sterilized	3,2	0,8	2,2	2,6	2,5	4,9	3,3	2,4
Declared Infecund	2,4	0,6	0,6	0,7	0,8	1,1	2,3	0,9
Total	**100,0**	**100,0**	**99,9**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Number	125	969	1 418	988	605	364	430	4 899

Note:"Soon" means within 2 years; "Later" means to delay 2 or more years.

The percentage of women who desire to have a child within two years decreases with the increase in number of living children. Similarly, the percentage of women who want another child later reaches a maximum at parity 1 and then decreases with increasing parity. On the other hand, the percentage of women who do not want another child increases rapidly with the increase in the number of living

children. Fully 58 percent of women with 2 living children say they want no more, and 80 percent of those with 3 living children want no more. There is clearly a desire among Mongolian women to limit the size of their families.

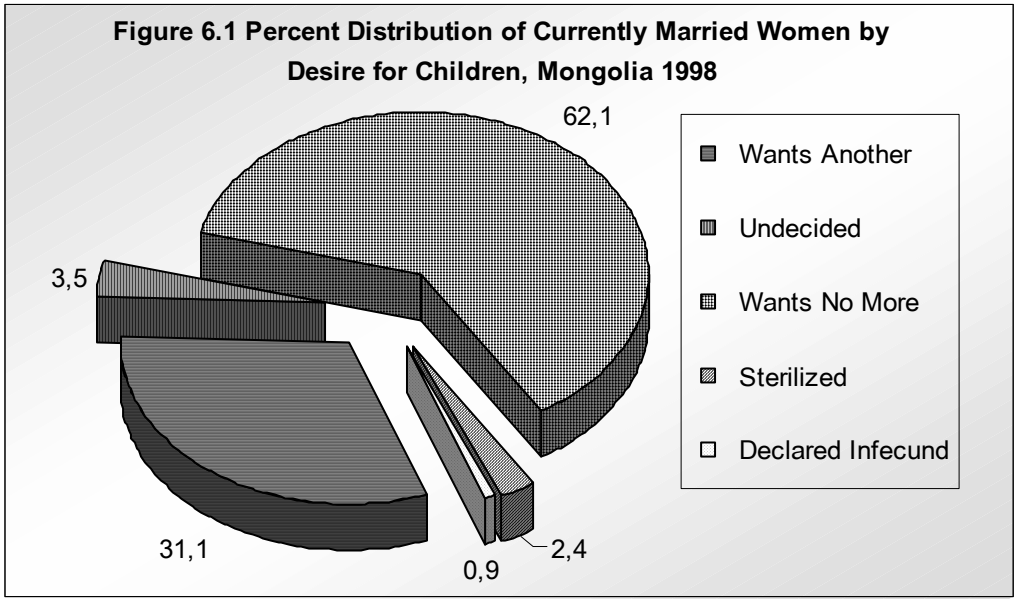


Table 6.02 shows the percent distribution of currently married women by desire for children according to age. With increasing age, the percent of women who desire more children decreases, and the percent who want no more children increases. Sentiments change rapidly with age: nearly one half of married women of ages 25-29 want another child, but only 8 percent of those 35-39 want another. Comparing the same age groups, the number who say they want no more increases from 43 percent to 86 percent.

Table 6.02 Percent Distribution of Currently Married Women by Desire for Children, According to Age, Mongolia 1998

Desire for More Children	Age 5-year Groups							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total
Wants Another Soon	21,2	26,2	24,0	18,5	6,1	0,9	0,3	15,0
Wants Another Later	58,8	45,0	23,6	7,9	0,7	0,0	0,0	15,2
Wants, Unsure Timing	2,4	1,2	1,2	0,7	1,0	0,2	0,0	0,9
Undecided	1,2	4,2	6,8	3,9	2,1	0,5	0,3	3,5
Wants No More	16,5	22,9	42,6	66,1	86,0	91,8	91,7	62,1
Sterilized	0,0	0,4	1,4	2,6	3,3	5,1	2,4	2,4
Declared Infecund	0,0	0,1	0,4	0,3	0,7	1,6	5,3	0,9
Total	**100,0**	**100,0**	**99,9**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Number	85	767	1 110	1 010	957	633	337	4 899

Note:"Soon" means within 2 years; "Later" means to delay 2 or more years.

Table 6.03 Percentage of Currently Married Women Who Want No More Children or Who Have Been Sterilized, by Number of Living Children and Selected Background Characteristics, Mongolia 1998

Background Characteristics	Living Children (Including Current Pregnancy)							
	0	1	2	3	4	5	6+	Total
Residence								
Urban	7,6	12,9	65,2	87,2	96,5	97,4	93,9	63,3
Rural	*	17,1	54,9	77,7	93,4	95,7	97,7	65,6
Region								
Central	8,3	16,9	62,2	85,2	96,4	98,3	95,3	66,5
East	*	13,8	65,7	87,0	93,1	95,7	98,1	73,7
West	6,9	11,3	48,1	72,5	92,7	92,9	97,8	63,9
South	*	15,6	60,8	78,8	95,1	96,7	97,1	64,5
Ulaanbaatar	8,7	14,1	64,5	85,9	95,9	98,6	94,7	59,0
Highest Education Level								
Primary or Less	*	31,9	71,4	84,2	94,0	94,4	96,9	81,1
Incomplete Secondary	7,1	13,1	62,2	82,2	92,9	97,0	98,5	67,5
Complete Secondary	4,3	11,3	57,5	77,4	97,1	96,8	93,2	54,8
More than Secondary	12,5	16,8	60,3	84,6	95,0	96,6	95,5	66,0
Total	**8,8**	**14,8**	**60,2**	**82,2**	**94,9**	**96,4**	**96,5**	**64,5**

*Percentage based on fewer than 25 cases.

Table 6.03 presents the percentage of currently married women who want no more children by number of living children and residence, region and level of education. About 65 percent of currently married women want no more children (this includes women who have been sterilized). The percentages of women who want no more children among those with two or three living children are higher for urban areas than for rural areas by about 10 percent. Therefore, women in urban areas want to control their fertility at an earlier stage than women in rural areas. Similarly, the percentages of women who want no more children among those with two or three children are relatively lower for West region compared with other regions. It can be concluded that women in West region want to have more children than women in other regions. There is little relationship between the level of education of women and the desire to have no more children, except that a higher percentage of women with primary or less wish to stop childbearing at parities 1 and 2.

Need for Family Planning

Table 6.04 presents the percent of women with unmet need and met need and total demand for family planning, by age, residence, region and educational level. Total demand for family planning is the sum of those women who need to use family planning but are not using for some reason (unmet need) and women who are using family planning (met need). The group of women with an unmet need consists mainly of women who say they want no more children and those who want to wait at least two years for another child, but who are not using a contraceptive method. It also includes pregnant women whose current pregnancy was not wanted or mistimed, and amenorrheic women whose last birth was mistimed or not wanted.

Table 6.04 Percent of Currently Married Women with Unmet Need, Met Need, and Total Demand for Family Planning Services by Background Characteristics, Mongolia 1998

Background Characteristics	Unmet Need for FP			Met Need - Currently Using			Total Demand for FP			% Dem. Satisfied	Number of Women
	Unmet-Space	Unmet-Limit	Unmet - Total	Met-Space	Met-Limit	Met-Total	Tot.Dem.-Space	Tot.Dem.-Limit	Tot.Dem.-Total		
Age 5-year Groups											
15-19	7,1	2,4	9,4	17,6	5,9	23,5	24,7	8,2	32,9	71,4	85
20-24	7,7	2,7	10,4	38,1	10,0	48,1	45,8	12,8	58,5	82,2	767
25-29	4,1	6,0	10,2	35,2	25,6	60,8	39,4	31,6	71,0	85,7	1 110
30-34	3,0	7,6	10,6	19,0	49,7	68,7	22,0	57,3	79,3	86,6	1 010
35-39	0,2	9,4	9,6	4,7	66,1	70,8	4,9	75,5	80,5	88,1	957
40-44	0,2	9,5	9,6	0,3	60,5	60,8	0,5	70,0	70,5	86,3	633
45-49	0,0	6,5	6,5	0,0	32,9	32,9	0,0	39,5	39,5	83,5	337
Residence											
Urban	3,0	6,1	9,1	20,9	41,0	61,9	24,0	47,1	71,1	87,1	2 384
Rural	2,9	7,7	10,5	17,4	40,5	57,9	20,3	48,2	68,4	84,6	2 515
Region											
Central	2,8	7,3	10,1	19,0	41,5	60,6	21,8	48,8	70,6	85,7	1 717
East	3,6	8,3	11,9	13,6	50,1	63,7	17,2	58,4	75,6	84,3	471
West	3,1	7,6	10,7	14,7	38,4	53,1	17,8	46,0	63,8	83,2	1 075
South	1,8	8,7	10,4	19,1	36,4	55,5	20,9	45,1	66,0	84,2	335
Ulaanbaatar	3,1	4,9	8,0	24,9	39,3	64,2	28,0	44,2	72,2	88,9	1 301
Highest Education Level											
Primary or Less	0,7	11,9	12,7	6,0	39,5	45,4	6,7	51,4	58,1	78,2	403
Incomplete Secondary	4,1	8,0	12,1	13,0	38,2	51,2	17,1	46,2	63,3	80,9	1 052
Complete Secondary	3,3	5,9	9,2	24,4	35,7	60,1	27,7	41,6	69,4	86,7	1 335
More than Secondary	2,6	6,1	8,6	21,3	45,4	66,7	23,9	51,4	75,3	88,5	2 109
Total	**2,9**	**6,9**	**9,9**	**19,1**	**40,7**	**59,8**	**22,1**	**47,6**	**69,7**	**85,9**	**4 899**

At the time of survey only 10 percent of currently married women were not using any family planning method but had a need to do so. The percentage of currently married women with unmet need does not vary much by age, place of residence or region, except that it is lower for Ulaanbaatar. The decrease in the percentage of women with unmet need corresponding to increase in educational level suggests a need to improve counseling for family planning among women with low levels of education.

About 60 percent of currently married women were using family planning. The percentage of women using a contraceptive is higher in urban areas than in rural areas, and is even higher in Ulaanbaatar. Contraceptive use increases with increase in educational level. Among currently married women, 41 percent are using because they want no more children (limiters), and 19 percent are using to delay the next birth (spacers). The percent of family planning demand satisfied (or percent of women who were using family planning in relation to total family planning demand) was 86, which is very good. This percent was somewhat higher for urban women than rural women, but did not differ much by region. It was lowest (71 percent) for women of ages 15-19. The percent of demand satisfied increases with increase in educational level. But even among the least educated women, 78 percent of the demand was satisfied.

Ideal Number of Children

In the RHS an attempt was made to measure women's "ideal" fertility. Women with no living children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" The question was phrased differently for women with living children: "If you could go back to the time when you had no children and could choose exactly the number of children to have in your whole life, how many would that be?"

Table 6.05 presents the percent distribution of all women by ideal number of children according to the number of living children. Also it presents the mean ideal number of children for all women, for married women, and for husbands. A little over 36 percent of women consider four children as the ideal number of children to have, while 28 and 24 percent consider two and three children as the ideal, respectively. It is notable that as parity increases, so does the ideal number of children. This is reflected both in the distribution of preferred family sizes and in the means, which increase from 2.7 for women with no living children to 4.4 for those with 6 or more.

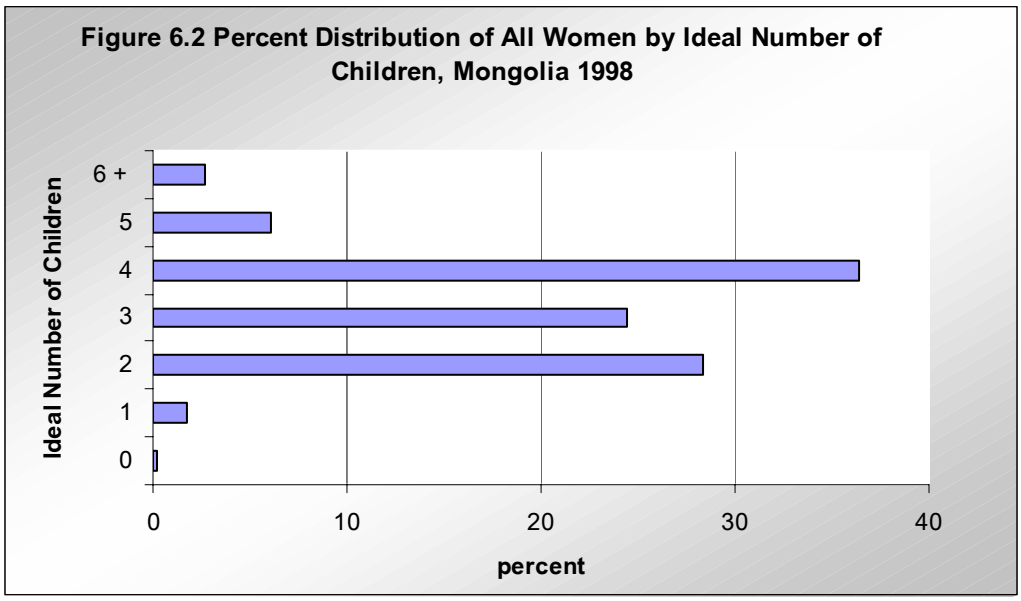
The positive correlation between actual and ideal number of children is not unexpected. There are two reasons for this. First, to the extent that women implement their preferences, those who want many children will tend to have many children. Second, women may adjust upwards their ideal size of family, as the actual number of children increases. This is called "rationalization". It is also possible that women with large families, being on average older than women with small families, have larger ideal sizes because of attitudes that they acquired many years ago.

Despite the possibility that some rationalization occurs, it is quite notable that many women express an ideal number of children which is lower than their actual

number of living children. Among women with 5 living children, 63 percent express a preference for fewer than 5; and among women with 6 or more living children, 80 percent would have preferred to have fewer.

Table 6.05 Percent Distribution of All Women by Ideal Number of Children and Mean Ideal Number of Children for All Women, Currently Married Women, and Husbands According to Number of Living Children, Mongolia 1998

Background Characteristics	Living Children (Including Current Pregnancy)							
	0	1	2	3	4	5	6+	Total
Ideal Number of Children								
0	0,7	0,0	0,0	0,1	0,3	0,0	0,2	0,2
1	3,8	3,4	0,4	0,4	0,3	1,0	0,2	1,8
2	49,3	37,4	27,2	9,7	11,5	10,2	10,8	28,4
3	25,4	33,7	23,7	32,9	8,2	15,5	8,4	24,4
4	15,8	22,2	45,1	49,4	68,9	36,6	48,8	36,4
5	3,8	2,5	2,9	6,4	7,3	31,7	11,2	6,1
6+	1,3	0,8	0,8	1,0	3,5	5,1	20,4	2,7
Non-numeric Response	0,1	0,0	0,0	0,1	0,0	0,0	0,0	0,0
Total	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**	**100,0**
Number	1 838	1 319	1 597	1 119	685	413	490	7 461
Mean Ideal Number of Children								
For All Women	2,7	2,9	3,3	3,6	3,8	4,1	4,4	3,3
Number of All Women	1 837	1 319	1 597	1 118	685	413	490	7 459
For Currently Married Women	3,0	2,9	3,3	3,6	3,9	4,1	4,4	3,5
Number of Currently Married Women	125	969	1 418	987	605	364	430	4 898
For Husbands	2,9	2,8	3,2	3,6	4,0	4,0	4,9	3,4
Number of Husbands	76	319	486	307	168	82	119	1 557



The mean ideal number of children does not differ much for currently married women from that of all women: 3,5 for married women and 3,3 for all women. (The main difference is at parity 0.) Somewhat more surprising is the fact that the preferences of the RHS sub-sample of husbands are almost identical to those of the

currently married women. It is often thought that men want many children, but this is not the case in Mongolia.

Table 6.06 Mean Ideal Number of Children for All Women by Age and Selected Background Characteristics, Mongolia 1998

Background Characteristics	Age 5-year Group							All Women
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Residence								
Urban	2,7	2,8	3,1	3,3	3,5	3,7	3,7	3,2
Rural	2,6	2,9	3,3	3,7	3,9	4,2	4,2	3,4
Region								
Central	2,6	2,9	3,2	3,6	3,7	4,1	4,1	3,3
East	2,3	2,9	3,0	3,3	3,6	3,6	3,2	3,1
West	2,7	2,9	3,3	3,8	4,0	4,3	4,3	3,5
South	2,6	2,8	3,2	3,4	3,7	3,8	3,6	3,2
Ulaanbaatar	2,8	2,8	3,1	3,3	3,4	3,6	3,7	3,1
Highest Education Level								
Primary or Less	2,5	2,7	2,6	3,8	3,8	4,1	4,4	3,3
Incomplete Secondary	2,6	2,8	3,2	3,5	3,9	4,0	3,9	3,1
Complete Secondary	2,8	2,9	3,1	3,6	3,7	4,0	3,7	3,2
More than Secondary	*	2,9	3,2	3,4	3,6	3,8	3,7	3,4
All women	**2,7**	**2,9**	**3,2**	**3,5**	**3,7**	**3,9**	**3,9**	**3,3**

* Mean based on fewer than 25 cases.

Table 6.06 examines women's mean ideal number of children by age, according to residence, region and educational level. The ideal number of children stated by women not surprisingly increases with increase in the age of women. In other words, younger women want to have fewer children than older women. Women's ideal number of children is slightly higher for rural areas compared with urban areas, and for West region compared with other regions, but it does not differ very much by educational level.

Wanted and Unwanted Fertility

In the RHS, women were asked a series of questions for each recent birth and any current pregnancy to determine whether the particular pregnancy was planned, unplanned but wanted at a later time, or unwanted. These questions form a powerful indicator of the degree to which women or couples successfully control childbearing. Table 6.07 presents the percent distribution of births (including current pregnancy) in the three years preceding the survey by fertility planning status, according to birth order and mother's age at birth. Out of the births in the three years preceding the survey, 85 percent were born to mothers who wanted to have a child at that time, while 4 percent were born to mothers who would have preferred to have them later (i.e. they were mistimed). Conversely, 11 percent of those children were born to mothers who did not want any more children. One quarter of those children born as a fourth or higher order birth were born to mothers who wanted no more children. Similarly, the percentage of unwanted births increases with increase in the age of mothers. About 30 percent of the children born to mothers at age 35 or above resulted from unwanted pregnancies.

Table 6.07 Percent Distribution of Births (Including Current Pregnancy) in the Three Years Preceding the Survey by Fertility Planning Status, According to Birth Order and Mother's Age at Birth, Mongolia 1998

Maternal Characteristic	Planning Status of Birth			Total	Number of Births
	Wanted Then	Wanted Later	Wanted No more		
Birth Order*					
1	90,5	3,6	6,0	100,0	873
2	88,7	5,5	5,9	100,0	785
3	85,5	4,6	9,9	100,0	475
4+	70,8	3,9	25,3	100,0	558
Age at Birth*					
<19	81,8	6,1	12,1	100,0	231
20-24	88,3	4,7	7,0	100,0	1 034
25-29	86,7	4,6	8,6	100,0	775
30-34	84,3	3,3	12,4	100,0	427
35-39	68,9	2,2	28,9	100,0	180
40-44	65,1	2,3	32,6	100,0	43
Total	**85,0**	**4,4**	**10,6**	**100,0**	**2 691**

* Including current pregnancy

Table 6.08 Total Wanted Fertility Rates and Total Fertility Rates for the Three Years Preceding the Survey, by Selected Background Characteristics, Mongolia 1998

	Fertility Rates	
	Wanted TFR	TFR
Residence		
Urban	2,2	2,5
Rural	3,1	3,7
Region		
Central	2,9	3,2
East	2,4	3,0
West	3,3	3,9
South	3,1	3,5
Ulaanbaatar	2,0	2,2
Highest Education Level		
Primary or Less	2,8	3,4
Incomplete Secondary	3,1	3,7
Complete Secondary	2,7	2,9
More than Secondary	2,5	2,8
Total	**2,7**	**3,1**

Table 6.08 compares total wanted fertility rates with total fertility rates for the three years preceding the survey, by residence, region and mother's educational level. These wanted fertility rates are calculated in exactly the same manner as the conventional age-specific fertility rates presented in Chapter 3, except that births

classified as unwanted are omitted from the numerator. The remaining births are then cumulated to form a wanted total fertility rate analogous to the conventional total fertility rate (TFR). A birth is considered wanted if the number of living children at the time of conception was less than the current ideal number of children, as reported by the respondent. Wanted fertility rates express the level of fertility that would result if all unwanted births were prevented.

In Mongolia, if women had only the births they wanted, the total fertility rate would be 2,7, rather than the current actual rate of 3,1. The biggest reductions in fertility would occur for women in rural areas, for those living in East and West regions, and for those with less than completed secondary education. It is these groups of women who should be the principal focus of the educational efforts of the National Reproductive Health Program.

Summary

In general, it has been seen that Mongolian women and men wish to control their fertility. Among currently married women with 2 living children, a majority (58 percent) want no more children; and among those with 3, 80 percent want no more. Women are quite successful in controlling their fertility through the use of contraception: 60 percent of married women are using a method, representing 86 percent of the demand for family planning. Among recent births, 85 percent occurred when they were wanted. However, it was also seen that there is still need for family planning services to help women achieve their ideal family size, particularly among women with less than completed secondary schooling, those living in the rural area, and those residing in East and West regions.

CHAPTER VII

INFANT AND CHILD MORTALITY

Tseveennaym Tserendulam

Introduction

In the middle of the 20th century the mortality rate of the Mongolian population declined, as was the case in almost all the developing countries of the world. In 1989 eight deaths occurred per 1000 population. This indicator, the crude death rate, has decreased even more and by the end of 1998 it reached six deaths per 1000 population. According to age, the mortality rate is higher for infants and children aged 0-4 than other age groups. (Data source: MOHSW).

The World Summit for Children, held in 1990, set forth a package of objectives to be implemented by the year 2000. Among these objectives was an aim to reduce infant and under-five mortality by one third, or to 50 and 70 deaths per 1000 births, respectively, whichever is less. This was reaffirmed at the 1994 International Conference on Population and Development (ICPD, Program of Action, paragraph 8.13). The Population Policy of Mongolia announced the intention to reduce the mortality rates of infants and children under five years of age by one third from the level of 1990 in the period up to 2010-2015 (The Population Policy of Mongolia, 23 May 1996).

Having information on levels and trends of infant and child mortality is important for planning and evaluating health activities in favor of infants and children. The objective of this chapter is to present information on levels, trends and differentials of infant and child mortality by some demographic and social indicators. Also we will show children's mortality risk according to the risk factors of mother's age, birth interval and birth order. The RHS compiled data on neonatal, postneonatal, infant, child and under-five mortality by asking women for a complete birth history, including survival status, and age at death for those who died.

Neonatal, postneonatal, infant, child and under-five mortality rates are shown for five year periods preceding the survey in the Table 7.01. These rates are estimated directly from the birth history. They represent the probability of death prior to a certain age. The neonatal mortality rate is calculated as the probability of dying during the first month of life. The infant mortality rate is the probability of dying before the first birthday. The postneonatal mortality rate is calculated as the difference between the infant and neonatal mortality rates, and is therefore not a true probability. Child mortality is the probability of dying between the first and fifth birthdays, while the under-five mortality rate is the probability of dying between birth and the fifth birthday.

Mortality Levels and Trends

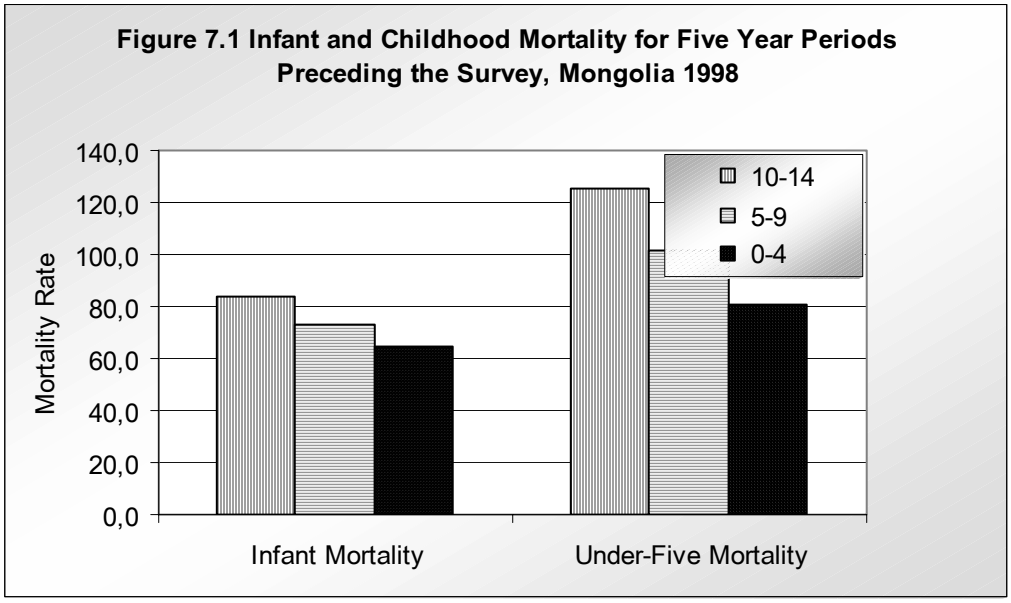
Table 7.01 shows that neonatal mortality has an increasing trend while infant and under five children's mortality have declined. (However, the apparent increase in neonatal mortality may be due to under-reporting of early deaths that occurred in the

more distant past, and this would lead to an under-estimation of the real decline in infant mortality.) In 1984-1988 out of 1000 live births, 83 died before reaching their first birthday. The rate declined to 65 in 1994-1998. Under-five mortality declined by about 44 points in 1994-1998 compared to 1984-1988, from 125 to 81 per thousand. Thus, over the past ten years, the decline in infant and child mortality has been substantial.(See Figure 7.1.)

Table 7.01 Neonatal, Postneonatal, Infant, and Childhood Mortality for Five Year Periods Preceding the Survey, Mongolia 1998 (Excludes Month of Interview From Analysis)

Five-year Periods Preceding Survey	Mortality Rate (Per Thousand)				
	Neonatal Mortality **(NN)**	Postneonatal Mortality **(PNN)**	Infant Mortality **(1q0)**	Child Mortality **(4q1)**	Under-Five Mortality **(5q0)**
0-4	34,5	30,5	65,0	17,2	81,0
5-9	29,9	42,9	72,8	30,9	101,5
10-14	24,0	59,5	83,5	45,7	125,3

However, it should be noted that these most recent rates from the survey are much higher than the registered rates produced by administrative and medical authorities. According to these sources, the infant mortality rate for 1998 was 36 per thousand, compared to the survey's rate of 65 for the period 1994-98 (National Statistical Office, 1998 Statistical Yearbook). The registered rate is probably 40 to 45 percent too low. This is a subject for further investigation. See Appendix B for confindence limits of survey estimates. But there should be no doubt concerning the veracity of the rates for the most recent period elicited from the survey: mothers do not invent deaths to report to interviewers!



Mortality Differentials

Neonatal, postneonatal, infant and child mortality rates are shown in Table 7.02 for the ten years preceding the survey by urban and rural area, region of residence, and mother's educational level. Ten-year rates are utilized for studying differential mortality in order to assure statistical reliability. Children's mortality rates are much higher in rural areas than in urban areas, probably because of the long distances to health centers and difficult access to medical emergency assistance, characteristic of rural areas.

The rates of neonatal, infant and under-five mortality according to regional background show important differences between regions. Mortality at these ages is the highest in the West region and lowest in the South region. In general, mortality rates are relatively high in the Central, East and West regions, and are low in the South region and Ulaanbaatar. According to the mother's educational level, neonatal mortality of children whose mothers completed secondary school is one-third lower than children whose mothers have a primary or less education. Under-five mortality for children of mothers who have primary or less education is 1.9 times higher than for children whose mothers have more than secondary education. As education increases, neonatal, infant and under-five mortality decline. Hence, health authorities should organize activities which tend to increase the health education of mothers who have a low level of education and expand reproductive health assistance among them.

Table 7.02 Neonatal, Postneonatal, Infant, and Childhood Mortality by Selected Socioeconomic Background Characteristics for the Ten Year Period Preceding the Survey, Mongolia 1998 (Excludes Month of Interview From Analysis)

Background Characteristics	Mortality Rate (Per Thousand)				
	Neonatal Mortality **(NN)**	Postneonatal Mortality **(PNN)**	Infant Mortality **(1q0)**	Child Mortality **(4q1)**	Under-Five Mortality **(5q0)**
Residence					
Urban	26,6	28,0	54,5	21,5	74,8
Rural	35,9	43,6	79,4	27,0	104,3
Region					
Central	30,4	46,4	76,8	26,7	101,5
East	37,6	38,9	76,5	24,7	99,3
West	37,3	39,4	76,8	28,6	103,2
South	20,1	25,1	45,2	14,9	59,4
Ulaanbaatar	29,6	21,9	51,5	19,8	70,3
Mother's Education Level					
Primary or Less	44,2	55,5	99,7	46,8	141,8
Incomplete Secondary	37,3	45,3	82,5	33,7	113,4
Complete Secondary	28,8	39,8	68,6	17,3	84,7
More than Secondary	28,7	26,5	55,3	19,4	73,6
Total	**32,1**	**37,2**	**69,3**	**24,6**	**92,2**

Neonatal, postneonatal, infant and child mortality rates are shown in Table 7.03 for the ten years preceding the survey by sex, mother's age at birth, birth order,

birth interval and size of child at delivery. Mortality of males is higher than that of females at all ages, just as it is in the rest of the world.

Table 7.03 Neonatal, Postneonatal, Infant, and Childhood Mortality by Selected Bio-Demographic Background Characteristics for the Ten Year Period Preceding the Survey, Mongolia 1998 (Since 1990 for Size at Birth of Child) (Excludes Month of Interview From Analysis)

Background Characteristics	Mortality Rate (Per Thousand)				
	Neonatal Mortality **(NN)**	Postneonatal Mortality **(PNN)**	Infant Mortality **(1q0)**	Child Mortality **(4q1)**	Under-Five Mortality **(5q0)**
Sex of Child					
Male	37,7	43,1	80,7	27,1	105,7
Female	26,3	31,1	57,3	22,0	78,1
Mother's Age at Birth					
Less than 20	43,3	42,6	85,9	18,1	102,4
20-29	30,4	37,3	67,7	24,2	90,3
30-39	33,4	34,6	68,0	28,9	95,0
Birth Order					
1	34,1	31,1	65,1	17,9	81,9
2-3	28,4	35,3	63,7	23,7	85,9
4-6	37,3	45,0	82,3	32,3	111,9
7+	29,1	55,2	84,3	35,6	116,9
Previous Birth Interval					
< 2 Years	47,7	59,3	107,0	31,3	134,9
2-3 Years	21,9	34,3	56,2	29,4	83,9
4 Years or More	25,0	21,8	46,7	16,2	62,2
Size at Birth					
Small or Very Small	96,0	49,5	145,5	30,5	171,6
Average or Larger	18,0	25,7	43,7	14,4	57,4
Total	**32,1**	**37,2**	**69,3**	**24,6**	**92,2**

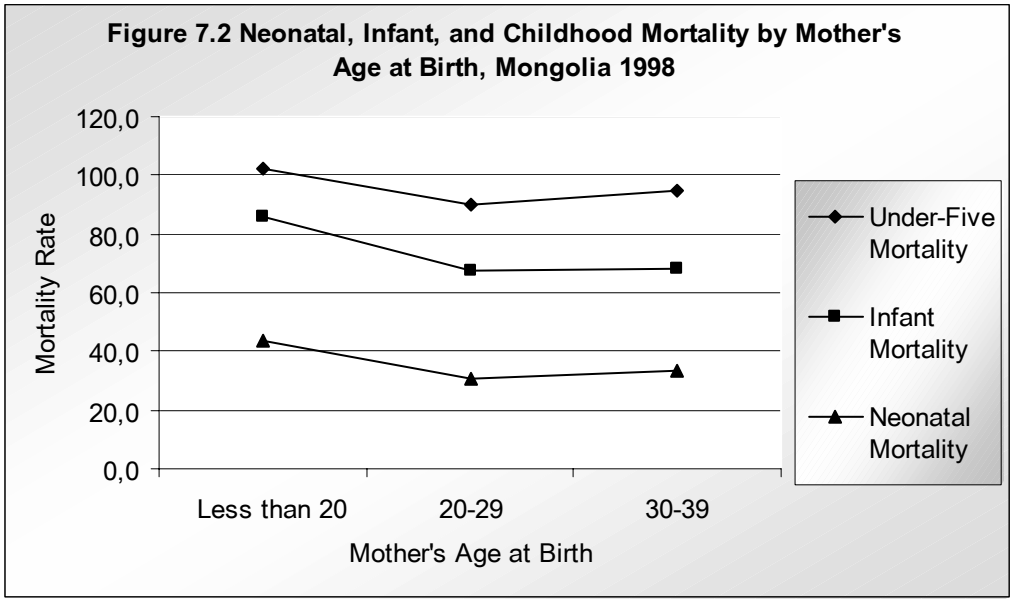
Mother's age at birth, birth order and birth interval are important factors that influence neonatal, postneonatal, infant and child mortality. Throughout the world, the probability of dying for children born to mothers aged over 35 and to mothers under age 20 is high, and this is also true in Mongolia. For example: neonatal mortality is 43 per 1,000 for children born to mothers under 20 while it is 30 per 1,000 for children born to mothers aged 20-29. Infant mortality of infants born to mothers under 20 is higher by 18 points than of those infants born to mothers aged 20-29. Also, under-five mortality of children born to mothers under age 20 is higher than of those whose mothers are older. (See Figure 7.2.)

Mortality increases with increasing birth order. Under-five mortality of children born of 7th or higher birth order is 117 per 1,000, while under-five mortality of first births is 82 deaths per 1,000.

The length of the birth interval is a very important factor for the survival status of infants and children. If the length of the birth interval is short (less than two years after a previous birth) the probability of dying is very high. For example: the probability of dying before age five for children born less than two years after a previous birth is more than double that for those children born four or more years after

a previous birth. Due to a short birth interval, women deliver children with a weak health status.

The neonatal mortality rate is roughly 5 times higher for the children judged by their mothers to be small or very small at birth than for those judged to be average or larger than average. The infant and child mortality rates for these small children are 3 times higher than for other children.



High Risk Fertility Behavior

Table 7.04 presents the mortality risk ratio of children born in the past five years by the nature of the risk, in terms of mother's age, birth order and birth interval. In this table there are four categories of risk: mother's age under 18, mother's age over 34, birth order of 4 or higher, and birth interval less than 24 months.

The risk ratio is the ratio of the proportion dead of children in each category of risk to the proportion dead of children in the category of "not in any risk". (For women who procreate, having a first birth is an unavoidable risk, and is separated from other risks if the woman is between 18 and 34 years of age.) Women are assigned to a given category of risk (either single or multiple) based on the situation in which they would find themselves at the birth of a child if that child were conceived in the month of interview: current age less than 17 years and 3 months; current age greater than 34 years and 3 months; most recent birth occurred less than 15 months ago; most recent birth was of order 3 or higher.

The survey shows that over 29 percent of women are subject to a single risk. The two most important are a short birth interval (10 percent of women) with a risk ratio of death to the child of 2.17, and high birth order (13 percent of women) with a risk ratio of 1.17. The most frequent multiple risk group of women is that of older age and high birth order (over 32 percent of women), with a risk ratio of 1.30. The

highest risk group is that of a short birth interval combined with high birth order, involving 5 percent of women, with a risk ratio of death to the child of 3.20.

Table 7.04 Percentage of Children Born in the Last 5 Years at Elevated Risk of Mortality and Percentage of Currently Married Women at Risk of Conceiving a Child with an Elevated Risk of Mortality, According to Category of Increased Risk, Mongolia 1998

Background Characteristics	Births in Last 5 Years		
	Percent of Births	Risk Ratio	Percent CMW
Risk Category			
Not in Any Risk	30,9	1,00	27,5
First Birth	31,4	1,21	3,2
Single risk			
Mother Age < 18	1,9	2,03	0,0
Mother Age > 34	1,4	0,39	6,7
Birth Interval < 24 Months	13,0	2,17	10,3
Birth Order > 3	11,1	1,17	12,5
Subtotal	27,4	1,66	29,6
Multiple risk			
Age<18 & BI<24	0,1	0,00	0,1
Age>34 & BI<24	0,1	0,00	0,2
Age>34 & BO>3	5,4	1,30	32,5
Age>34 & BI<24 BO>3	0,7	1,61	1,7
BI<24 & BO>3	4,1	3,20	5,2
Subtotal	10,3	2,06	39,6
In Any Risk Category	37,6	1,77	69,2
Total	**100,0**	-	**100,0**
Number	3 857	-	4 899

Summary

Considering the evidence presented in the last table and indeed, the entire chapter, in order to reduce the level of infant and child mortality it is best for women to deliver after the age of 18 and before the age of 35, have fewer than 4 children, and maintain an interval of at least 3 years between births. This is an important message for health workers to impart to women of childbearing age and their husbands.

CHAPTER VIII

REPRODUCTIVE AND CHILD HEALTH

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Introduction

Mongolia has had many achievements in the health sector. Some health indicators such as infant and child mortality have improved significantly over the past 10-15 years (see Chapter 7). At the beginning of 1990 the country started to move towards a market economy. In the recent past the expenditure on health per capita has decreased by 40 percent, due to lack of Government funds. The Government is taking various measures to improve health services, but these measures have had difficulty in meeting the objectives set forward in various government plans.

As stated in the Program of Action of the International Conference on Population and Development (ICPD) held in 1994 in Cairo: "All countries should strive to make accessible through the primary health-care system, reproductive health services to all individuals of appropriate ages as soon as possible and no later than the year 2015. Reproductive health care should, inter alia, include: family planning counseling, information, education, communication and services; education and services for prenatal care, safe delivery and post-natal care, especially breast-feeding and infant and women's health care…" (Paragraph 7.6).

To help in the evaluation of the primary health-care system in Mongolia, this chapter has three main components. These are:

- prenatal and delivery care
- characteristics of the delivery
- common childhood illnesses and their treatment

Few countries have access to national estimates of the type of antenatal and delivery care pregnant women receive, but this information is of great value in identifying subgroups of women who do not utilize these services and in evaluating the quality of the services received. Antenatal care is studied according to the time of the first visit for pregnancy control, and who provided the care. Delivery care is investigated by indicators such as type of the assistance, place of the delivery, birth complications and whether the child was born by caesarian section or not.

Pregnancy and delivery complications such as premature birth, and the weight and size of infant at birth are very important issues for the countries which seek to decrease their infant mortality rate. Mongolia has developed a national program on alleviation of children's diarrhea and acute respiratory infection covering the period 1996-2000. One of the main objectives of the survey was to gather information that can assist in the implementation of this program to eliminate these three childhood diseases.

Antenatal Care

Delivery complications can be reduced if women regularly visit the nearest health facility, consult with doctors, and are subject to permanent monitoring by them.

The percent distribution of births in the five years preceding the survey, by source of antenatal care received during the pregnancy, according to selected background characteristics, is shown in Table 8.01. The table shows that 4 percent of births to women who delivered in the five years preceding the survey occurred without any antenatal care from anyone. But for 48 percent of births, women received antenatal care from gynecologists, 16 percent from other doctors and 25 percent from professional midwives. Thus, the vast majority of births (90 percent) receive antenatal care from health professionals. Comparing the figures shown for receiving antenatal care from gynecologists, there are marked differences according to the urban-rural residential classification. Nearly 72 percent of the births to women in urban areas received antenatal care from gynecologists as compared to 34 percent of births in rural areas. This figure rises to 80 percent in Ulaanbaatar. Such a significant difference can be attributed to the fact that professionally trained doctors and gynecologists are concentrated in major urban hospitals. But 39 percent of the women of the rural area, compared to 4 percent of the women of urban area were under the care of midwives.

Births to older women and first births are more likely to receive antenatal care from gynecologists. Thus 54 percent of first births and 50 percent of births to women over the age of 35 received antenatal care from gynecologists. According to women's educational background, better educated women are more likely to receive antenatal care from gynecologists or other doctors than less educated women. The births least likely to receive any antenatal care are those of order 6 or higher, those born to mothers 35 years or older, and those whose mother had only primary or less education.

Table 8.01 Percent Distribution of Live Births in the Last 5 Years by Source of Antenatal Care (ANC) During Pregnancy, According to Maternal and Background Characteristics, Mongolia 1998

Background Characteristics	Antenatal Care									Number of Births
	Gynecologist	Other doctor	Prof. Midwife	Other Midwife	Medical Assist.	Other	No One	DK/Missing	Total	
Age at Birth										
<20	43,8	16,2	26,0	8,5	0,0	0,0	5,2	0,3	100,0	365
20-34	48,8	16,3	25,2	6,2	0,1	0,2	3,3	0,0	100,0	3201
35+	50,2	14,4	24,4	4,5	0,0	0,0	6,2	0,3	100,0	291
Birth Order										
1	54,3	16,3	20,9	5,2	0,0	0,2	2,9	0,1	100,0	1285
2-3	45,7	17,1	27,1	6,6	0,1	0,1	3,3	0,1	100,0	1751
4-5	46,6	12,2	29,3	7,5	0,0	0,0	4,3	0,2	100,0	509
6+	42,0	17,0	25,6	7,1	0,0	0,0	8,3	0,0	100,0	312
Residence										
Urban	71,7	19,9	3,5	2,5	0,1	0,1	2,3	0,0	100,0	1491
Rural	33,7	13,9	38,9	8,7	0,0	0,2	4,5	0,1	100,0	2366
Region										
Central	45,6	16,9	26,5	6,0	0,1	0,1	4,6	0,1	100,0	1378
East	39,2	13,3	42,3	5,2	0,0	0,0	0,0	0,0	100,0	362
West	32,7	19,6	33,0	9,8	0,0	0,4	4,5	0,0	100,0	1085
South	50,5	8,6	27,2	10,0	0,0	0,0	3,2	0,4	100,0	279
Ulaanbaatar	79,7	14,1	2,7	0,8	0,1	0,0	2,7	0,0	100,0	753
Mother's Education Level										
Primary or less	37,2	12,8	28,4	12,8	0,0	0,0	8,5	0,4	100,0	282
Incomplete Secondary	36,1	15,7	33,8	9,4	0,0	0,1	4,9	0,1	100,0	1022
Complete Secondary	51,2	15,6	24,9	5,0	0,1	0,2	3,0	0,0	100,0	1231
More than Secondary	57,7	17,9	18,2	3,7	0,1	0,1	2,3	0,1	100,0	1322
Total	**48,4**	**16,2**	**25,2**	**6,3**	**0,1**	**0,1**	**3,7**	**0,1**	**100,0**	**3857**

Antenatal Care Visits

Complications related to birth and pregnancy can be prevented if women visit health facilities immediately after becoming pregnant or during the first several months of pregnancy for consultation and monitoring of the pregnancy. Table 8.02 presents the timing of women's first antenatal care visit and the median time of first visit in connection with births in the last 5 years. Out of women who were delivered in the last five years, 56 percent visited a health facility within four months, and 27 percent of women first visited at 4-5 months of pregnancy. The median is an indicator which divides the population equally in two halves. The survey results show that 50 percent of women made their first antenatal care visit within 3.7 months of becoming pregnant, and in turn the remaining 50 percent made their first antenatal care visit after 3.7 months of pregnancy.

Table 8.02 Percent Distribution of Live Births in the Last 5 Years by Stage of Pregnancy at the Time of the First Antenatal Care Visit, Mongolia 1998

Timing of 1st Antenatal Check	Total
No Antenatal Care	3,7
Less than 4 Months	56,4
4-5 Months	27,0
6-7 Months	9,2
8+ Months	3,6
DK/Missing	0,2
Total	**100,0**
Median	3,7
Total	**3857**

Usage of Iron Pills

Considering that severe anemia occurs among 40 percent of Mongolian women of childbearing age, doctors recommend that pregnant women take iron pills every day during the first 3 months of pregnancy; the goal is to supply 90 percent of pregnant women with iron pills and decrease anemia by 1/3 by the year 2000 (Badamhand, Obstetrics 1998:186). Pregnant women should use iron pills on the basis of the monitoring doctor's recommendations.

The survey indicates that 35 percent of pregnant women answered that when they were carrying their last child they took fewer than 90 iron pills, 7 percent took 90 or more iron pills, while 58 percent of women took none. The percentage of women who never took iron pills was higher at young ages (62 percent of women under 20). In the urban area 54 percent of women were not given iron pills, while 60 percent of women in rural areas did not receive pills. The highest percentage women who were not given iron pills was 66 percent in West region. According to educational level, usage of iron pills was 48 percent for highly educated women, but only 29 percent for the least educated women.

Clearly, the program to prevent anemia during pregnancy through the use of iron pills has much still to achieve.

Table 8.03 Percent Distribution of Most Recent Live Births in the Last 5 Years by Number of Iron Pills Taken During Pregnancy, According to Maternal and Background Characteristics, Mongolia 1998

Background Characteristics	Number of Iron Pills					Number of Births
	None	Less than 90	90 or More	DK	Total	
Age at Birth						
<20	62,0	32,7	5,3	0,0	100,0	245
20-34	57,2	35,8	6,7	0,3	100,0	2 405
35+	56,7	33,2	10,1	0,0	100,0	268
Birth Order						
1	57,7	35,1	6,9	0,4	100,0	853
2-3	55,7	36,8	7,2	0,3	100,0	1 407
4-5	59,9	35,2	4,9	0,0	100,0	406
6+	64,3	28,2	7,5	0,0	100,0	252
Residence						
Urban	54,2	37,7	7,6	0,5	100,0	1 231
Rural	60,0	33,6	6,3	0,1	100,0	1 687
Region						
Central	56,9	37,0	6,1	0,1	100,0	1 041
East	51,3	42,1	6,5	0,0	100,0	261
West	65,6	27,0	7,1	0,3	100,0	747
South	47,9	41,9	9,8	0,5	100,0	215
Ulaanbaatar	55,2	37,3	7,0	0,5	100,0	654
Mother's Education Level						
Primary or less	71,5	24,6	3,9	0,0	100,0	207
Incomplete Secondary	62,8	32,6	4,4	0,3	100,0	731
Complete Secondary	57,1	35,1	7,6	0,3	100,0	927
More than Secondary	51,7	39,6	8,5	0,2	100,0	1 053
Total	**57,6**	**35,3**	**6,9**	**0,2**	**100,0**	**2 918**

Pregnancy Difficulties

Safe delivery and delivery without complications depend mainly on a woman's health status and preparation for becoming a mother. Table 8.04 presents women's pregnancy difficulties and whether or not they had difficulties when they were carrying their last child, by age, residence, region and educational level. Eighty percent of women said they had no difficulties with their last pregnancy. Among the interviewed women 10 percent had high blood pressure, 11 percent had swelling, and for 2 percent the fetus was in the wrong position. The dominant complications are high blood pressure and swelling, particularly among the women 35 years and older.

Table 8.04 Percent Distribution of Most Recent Live Births in the Last 5 Years by Difficulties Experienced by the Mother in Carrying the Pregnancy, According to Maternal and Background Characteristics, Mongolia 1998

Background Characteristics	Difficulties in Carrying Pregnancy									Number of Births
	High Blood Pressure	Swelling	Wrong Position	Plancenta Too Low	Plancenta abruption	Narrow Pelvis	Too Much Fluid	Other	None	
Age at Birth										
<20	4,9	7,8	1,6	0,8	0,0	0,4	0,0	2,0	87,3	245
20-34	9,8	10,9	2,2	1,0	0,9	0,4	0,9	4,6	79,8	2 405
35+	17,9	13,4	3,7	1,5	0,7	0,0	0,7	5,2	72,4	268
Birth Order										
1	6,9	8,7	1,8	0,7	0,7	0,4	0,6	3,6	83,1	853
2-3	10,1	10,6	2,4	1,1	0,8	0,4	0,7	5,0	79,4	1 407
4-5	14,8	15,5	3,9	1,5	1,0	0,2	2,0	4,4	75,6	406
6+	13,9	11,9	0,4	1,6	0,8	0,4	0,0	3,6	76,6	252
Residence										
Urban	10,6	11,8	2,8	1,4	0,5	0,5	0,6	5,4	77,7	1 231
Rural	9,8	10,1	1,8	0,8	1,0	0,3	0,9	3,7	81,2	1 687
Region										
Central	11,6	12,7	2,2	0,8	0,8	0,2	0,8	5,9	78,0	1 041
East	3,4	6,1	1,9	1,5	0,8	0,0	0,0	4,2	85,4	261
West	11,4	9,2	2,1	1,3	1,1	0,3	1,1	2,5	80,6	747
South	5,6	8,4	1,4	0,9	1,9	0,9	0,9	1,9	85,6	215
Ulaanbaatar	10,6	12,4	2,9	1,1	0,2	0,8	0,8	5,2	77,2	654
Mother's Education Level										
Primary or less	11,1	12,1	1,9	1,0	1,9	0,0	1,4	1,9	79,7	207
Incomplete Secondary	9,2	8,8	1,8	0,8	0,1	0,3	0,5	3,1	83,9	731
Complete Secondary	9,3	11,4	2,3	1,2	1,0	0,6	0,8	4,2	79,9	927
More than Secondary	11,4	11,5	2,7	1,1	0,9	0,3	0,9	6,0	76,6	1 053
Total	**10,1**	**10,8**	**2,3**	**1,1**	**0,8**	**0,4**	**0,8**	**4,4**	**79,7**	**2 918**

Note: Totals add to more than 100% because of multiple difficulties.

Diseases Associated with Pregnancy

Table 8.05 shows that there were no diseases associated with 67 percent of pregnancies leading to the most recent birth. In their last pregnancy 25 percent of women suffered from kidney disease, followed by 9 percent with heart disease, and 6 percent with disease of the digestive apparatus. Liver, lung and nervous diseases occurred less frequently than the other diseases.

Table 8.05 Percent Distribution of Most Recent Live Births in the Last 5 Years by Diseases Suffered by the Mother During Pregnancy, According to Maternal and Background Characteristics, Mongolia 1998

Background Characteristics	Diseases During Pregnancy							Number of Births
	Heart	Kidney	Liver	Lung	Digestive Apparatus	Nervous	None	
Age at Birth								
<20	4,9	18,8	0,8	2,0	3,7	0,8	75,9	245
20-34	8,6	25,7	1,9	1,5	6,0	1,0	66,9	2 405
35+	14,6	28,7	3,0	2,6	6,7	1,5	59,3	268
Birth Order								
1	4,9	24,0	0,7	1,2	4,6	0,8	70,9	853
2-3	9,0	25,8	1,8	1,7	6,3	1,1	66,0	1 407
4-5	11,6	25,1	2,7	2,5	7,6	0,7	67,0	406
6+	16,3	28,6	4,8	2,0	5,6	1,6	58,7	252
Residence								
Urban	9,2	25,7	1,9	1,5	4,3	1,0	66,5	1 231
Rural	8,5	25,3	1,8	1,8	7,1	1,0	67,2	1 687
Region								
Central	10,6	27,4	2,5	1,7	7,2	1,4	64,9	1 041
East	6,1	14,2	1,5	1,5	6,1	0,4	77,8	261
West	8,3	26,4	1,6	2,0	5,8	0,5	65,6	747
South	9,3	20,5	0,9	0,9	3,3	0,5	73,0	215
Ulaanbaatar	7,5	27,4	1,7	1,5	4,7	1,2	65,3	654
Mother's Education Level								
Primary or less	11,1	29,5	2,4	2,4	8,2	1,0	63,8	207
Incomplete Secondary	7,7	23,8	1,6	1,1	5,7	1,2	70,3	731
Complete Secondary	8,5	24,7	1,3	1,5	5,6	1,0	67,7	927
More than Secondary	9,4	26,4	2,5	2,1	5,8	0,9	64,5	1 053
Total	**8,8**	**25,4**	**1,9**	**1,7**	**5,9**	**1,0**	**66,9**	**2 918**

Note: Totals add to more than 100% because of multiple diseases.

The survey shows that women who are older and of high parity were more likely to suffer from diseases associated with pregnancy. For example: 29 percent of women of age 35 years and older, and 29 percent of those with 6 of more children suffered from kidney disease at their last pregnancy. Among the women living in the Central region, West region and Ulaanbaatar the rate of diseases associated with pregnancy was high while it was low in the East and South regions. In the Central region, for example 11 percent of women had heart disease while 27 percent had kidney disease.

Place of Delivery

Table 8.06 shows that among children born in the last five years, 94 percent were born in a hospital or clinic while 5 percent of the children were born at home and 1 percent of the children were born elsewhere (grandmother's home, etc.). Seven percent of the children whose mothers are of age 35 or greater and 9 percent of the children of birth order 6 or higher were born at home. It is not uncommon that as women get older and parity increases, they tend to deliver at home.

Table 8.06 Percent Distribution of Live Births in the Last 5 Years by Place of Delivery, According to Maternal and Background Characteristics, Mongolia 1998

Background Characteristics	Place of Delivery				Number of Births
	Health Facility	At Home	Other	Total	
Age at Birth					
<20	93,2	4,9	1,9	100,0	365
20-34	94,4	4,9	0,7	100,0	3 201
35+	91,8	7,2	1,0	100,0	291
Birth Order					
1	96,1	2,9	1,0	100,0	1 285
2-3	93,9	5,5	0,6	100,0	1 751
4-5	92,1	6,9	1,0	100,0	509
6+	90,1	8,7	1,3	100,0	312
Residence					
Urban	97,7	1,9	0,4	100,0	1 491
Rural	91,8	7,0	1,1	100,0	2 366
Region					
Central	93,3	5,1	1,6	100,0	1 378
East	94,8	5,0	0,3	100,0	362
West	91,9	7,6	0,6	100,0	1 085
South	95,3	4,7	0,0	100,0	279
Ulaanbaatar	97,9	1,6	0,5	100,0	753
Mother's Education Level					
Primary or less	84,4	15,2	0,4	100,0	282
Incomplete Secondary	91,9	7,2	0,9	100,0	1 022
Complete Secondary	95,9	3,2	0,9	100,0	1 231
More than Secondary	96,2	2,9	0,9	100,0	1 322
Total	**94,1**	**5,1**	**0,9**	**100,0**	**3 857**

According to the residence, the percentage of children born at home in the rural areas is 7 percent compared to 2 percent in urban areas. Nearly 98 percent of children born in urban areas, including Ulaanbaatar, are delivered in health facilities. The data presented in Table 8.06 indicate that 15 percent of children of mothers with low education were born at home, compared to only 3 percent for children whose mothers have completed secondary school.

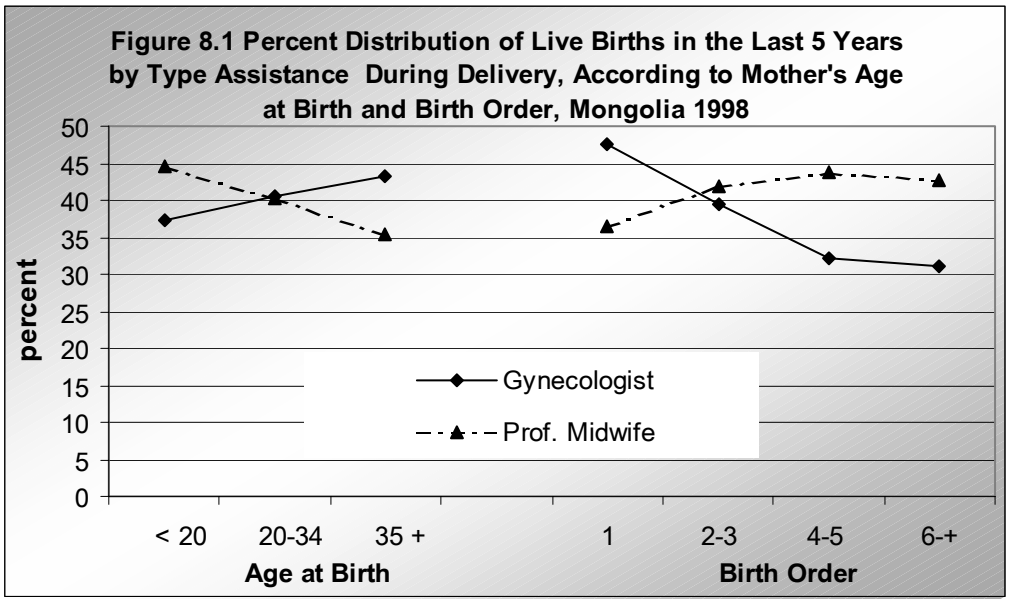
Assistance at Delivery

Table 8.07 shows that in the five years preceding the survey, almost 94 percent of births were delivered by health staff; about 41 percent of women received assistance from gynecologists, 40 percent from professional midwives, and 13 percent from doctors other than gynecologists. These results are consistent with the health statistics which indicate that during 1998 less than 1 percent of women did not receive assistance at delivery (Health Indicators 1998:71).

Table 8.07 Percent Distribution of Live Births in the Last 5 Years by Type of Assistance During Delivery, According to Background Characteristics, Mongolia 1998

Background Characteristics	Assistance During Delivery									Number of Births
	Gynecologist	Other Doctor	Prof. Midwife	Other Midwife	Medical Assist.	Tradit. Healer	Other	No One	Total	
Age at Birth										
<20	37,3	12,1	44,7	1,4	1,4	0,3	3,0	0,0	100,0	365
20-34	40,6	12,7	40,4	2,4	1,1	0,1	2,6	0,2	100,0	3 201
35+	43,3	13,1	35,4	3,1	0,3	0,0	4,5	0,3	100,0	291
Birth Order										
1	47,5	12,4	36,6	1,2	1,0	0,1	1,2	0,0	100,0	1 285
2-3	39,5	11,8	41,8	2,5	1,1	0,1	3,1	0,1	100,0	1 751
4-5	32,2	15,3	43,8	3,5	1,0	0,2	3,5	0,4	100,0	509
6+	31,1	14,4	42,6	4,2	1,0	0,0	6,1	0,6	100,0	312
Residence										
Urban	59,1	9,3	29,3	0,5	0,3	0,0	1,4	0,2	100,0	1 491
Rural	28,8	14,8	47,4	3,6	1,6	0,2	3,6	0,1	100,0	2 366
Region										
Central	39,4	11,9	41,4	3,0	1,6	0,1	2,5	0,2	100,0	1 378
East	30,7	18,0	44,5	2,2	1,1	0,0	3,3	0,3	100,0	362
West	29,3	16,5	45,4	3,4	1,1	0,3	4,0	0,0	100,0	1 085
South	40,1	6,5	48,7	1,8	0,7	0,0	2,2	0,0	100,0	279
Ulaanbaatar	63,6	8,2	26,3	0,0	0,1	0,0	1,5	0,3	100,0	753
Mother's Education Level										
Primary or less	27,7	15,6	42,9	3,5	1,1	0,7	8,5	0,0	100,0	282
Incomplete Secondary	32,9	14,6	43,1	3,3	2,0	0,1	3,7	0,4	100,0	1 022
Complete Secondary	40,6	11,2	43,7	2,0	0,7	0,1	1,5	0,1	100,0	1 231
More than Secondary	49,1	11,9	34,7	1,7	0,7	0,0	1,9	0,1	100,0	1 322
Total	**40,5**	**12,7**	**40,4**	**2,4**	**1,1**	**0,1**	**2,7**	**0,2**	**100,0**	**3 857**

As mother's age at delivery increases the percentage receiving assistance from gynecologists increases, and in turn the percentage receiving assistance from midwives decreases. But increases in birth order are associated with decreased assistance of gynecologists. In urban areas, 59 percent of births are delivered by gynecologists, as opposed to 29 percent in rural areas; this figure rises to 64 percent in Ulaanbaatar. Women's educational attainment is also strongly and positively correlated with assistance from gynecologists, from 28 percent for the least educated to 49 percent for the most educated.



Delivery Characteristics

In the five years preceding the survey, 5 percent of births were delivered by caesarian section (see Table 8.08). Among the women of age 35 or more, 10 percent of births were delivered by caesarian section. According to regional background, the one significant finding is that 10 percent of births to women living in Ulaanbaatar were delivered by caesarian section.

The survey obtained information regarding baby's weight at birth from mother's recall. Among children born in the five years preceding the survey, 8 percent weighed less than 2,5 kilograms. According to the data of the MOHSW for 1998, 5 percent of children were born with a weight less than 2,5 kilos (Health Indicators 1998:79).

The weight of children at birth varies by mothers' age. Among babies born to mothers under the age of 20 years, 10 percent weighed less than 2,5 kilograms. Twelve percent of babies in the West region were born underweight, as opposed only 4 percent in Ulaanbaatar.

The survey also gathered information on the mother's opinion of the child's size at birth. About 3 percent of babies were considered by their mothers to be very small, 16 percent to be smaller than average, and 81 percent to be average or larger than average. The differences by background characteristics correspond closely to those of weight at birth.

Table 8.08 Percent Distribution of Live Births in the Last 5 Years by Whether the Delivery Was by Caesarian Section, and by Birth Weight and the Mother's Estimate of Baby's Size at Birth, by Maternal and Background Characteristics, Mongolia 1998

Background Characteristics	Delivery by Caesarian Section	Weight at Birth			Size at Birth				Total	Number of Births
		Less than 2.5 kg	2,5 kg or More	DK/ Missing	Very Small	Smaller than Average	Average or Larger	DK/ Missing		
Age at Birth										
<20	4,7	10,1	85,5	4,4	3,6	20,3	75,6	0,5	100,0	365
20-34	4,7	8,1	87,9	4,0	2,7	14,9	81,6	0,9	100,0	3 201
35+	10,3	5,5	89,7	4,8	2,1	16,8	80,8	0,3	100,0	291
Birth Order										
1	5,8	8,7	88,9	2,4	3,1	17,2	79,5	0,2	100,0	1 285
2-3	5,1	7,5	87,9	4,5	2,1	14,4	82,5	1,0	100,0	1 751
4-5	4,1	8,4	86,2	5,3	3,5	13,4	81,1	2,0	100,0	509
6+	3,5	7,7	85,6	6,7	2,9	18,9	77,6	0,6	100,0	312
Residence										
Urban	8,0	5,4	93,8	0,7	1,9	12,5	85,5	0,1	100,0	1 491
Rural	3,3	9,7	84,1	6,2	3,2	17,5	78,1	1,3	100,0	2 366
Region										
Central	4,7	8,1	87,9	4,0	2,2	14,4	82,8	0,5	100,0	1 378
East	2,2	6,6	91,4	1,9	1,7	13,0	84,3	1,1	100,0	362
West	3,6	11,6	80,2	8,2	5,3	20,1	72,9	1,8	100,0	1 085
South	3,2	6,1	91,8	2,2	0,7	15,8	83,2	0,4	100,0	279
Ulaanbaatar	10,1	4,2	95,6	0,1	1,1	12,2	86,7	0,0	100,0	753
Mother's Education Level										
Primary or less	2,8	13,1	73,4	13,5	4,3	22,7	72,3	0,7	100,0	282
Incomplete Secondary	3,4	10,0	83,6	6,5	4,0	18,2	76,5	1,3	100,0	1 022
Complete Secondary	4,7	7,5	90,1	2,4	2,4	14,1	82,7	0,9	100,0	1 231
More than Secondary	7,3	6,1	92,1	1,8	1,7	13,4	84,6	0,4	100,0	1 322
Total	**5,1**	**8,1**	**87,8**	**4,1**	**2,7**	**15,6**	**80,9**	**0,8**	**100,0**	**3 857**

Delivery Complications

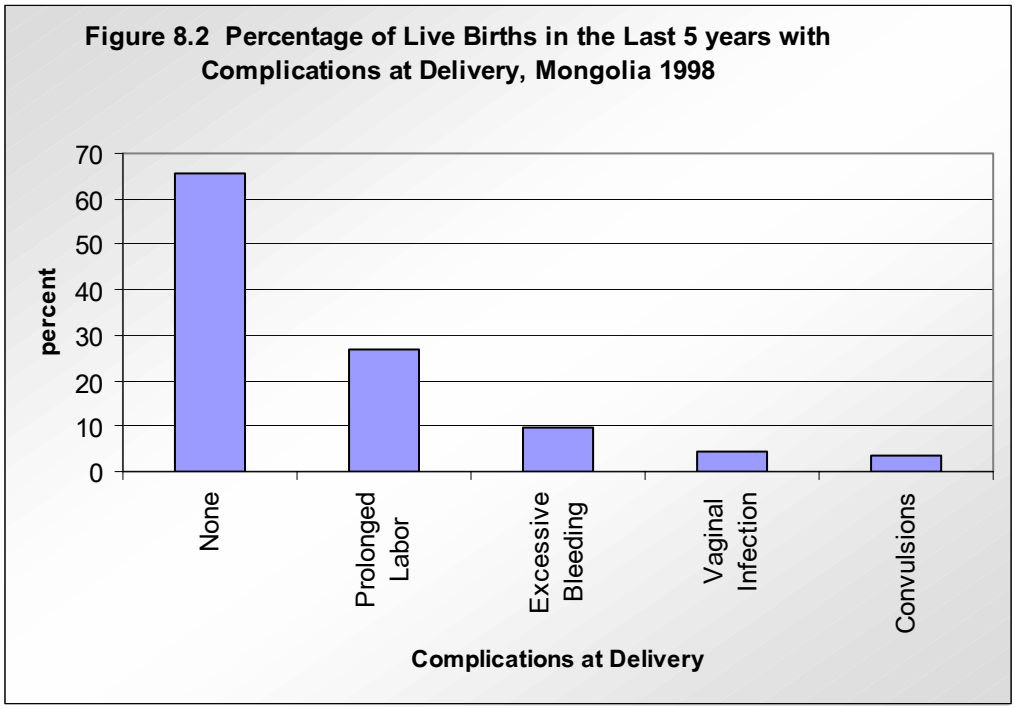
Pregnancy, and particularly delivery complications are the main causes of mortality among women of reproductive age in any country. It is estimated that every year throughout the world about one million women die due to pregnancy and delivery complications, and out of this number 99 percent of deaths occur in the developing countries (ICPD Program of Action). During 1998, 13295 Mongolian women had delivery complications while giving birth, representing 27 percent of deliveries (Health Indicators 1998:72). These are doctor-reported complications.

Table 8.09 shows that there were no self-reported complications associated with 66 percent of births delivered in the last five years. Nearly 27 percent of births involved prolonged contractions lasting for more than 12 hours, and nearly 10 percent excessive bleeding. Vaginal infections and convulsions occurred less frequently. Early neonatal death can depend on women's delivery complications. Delivery complications were much more frequent among babies who died during the first week following birth than among those who survived.

Table 8.09 Percentage of Live Births in the Last 5 years with Complications at Delivery, According to Antenatal and Delivery Care, Mongolia 1998

	Complications at Delivery					Number of Births
	Prolonged Labor	Excessive Bleeding	Vaginal Infection	Convulsions	None	
Medical Maternity Care						
Both	27,4	9,3	4,2	3,2	65,6	3 362
Antenatal	11,9	16,8	5,9	9,9	72,3	101
Delivery	27,2	9,8	6,6	4,6	63,9	346
None	20,8	6,3	4,2	0,0	75,0	48
Early Neonatal Death						
No	26,8	9,3	4,3	3,4	65,9	3 759
Yes	30,6	19,4	11,2	7,1	59,2	98
Total	**26,9**	**9,5**	**4,5**	**3,5**	**65,8**	**3 857**

Note: Totals exceed 100% because of multiple complications.



Acute Respiratory Infection (ARI)

The RHS included questions regarding cough prevalence and breathing difficulties in the two weeks preceding the survey among children under the age of 5 years. In Mongolia cough is widespread due to the changeable weather. So, the RHS tried to obtain information regarding the assistance that mothers provide their children with ARI.

During the two weeks prior to the survey 11 percent of the children had a cough with breathing faster than normal, and 77 percent of these children received health assistance (see Table 8.10). Children under the age of one year are the most likely to suffer from ARI (15 percent); the 3 and 4 year old children are the least likely to become infected (8 percent). Children living in the West region are less likely than others to suffer from ARI.

Table 8.10 Among All Children Under 5 Years of Age, the Percentage Who Were Ill with a Cough Accompanied with Fast Breathing, and the Percentage of Those Ill Who Had Contact with a Health Facility, According to Demographic and Background Characteristics, Mongolia 1998

Background Characteristics	Cough&Fast Breath	Cough/Taken to HF	Number of Children
Child's Age			
Under 6 Months	15,0	75,4	432
6-11 Months	15,1	72,7	365
12-23 Months	12,0	77,8	674
24-35 Months	12,3	83,1	673
36-47 Months	8,4	84,1	748
48-59 Months	7,8	62,5	715
Child's Sex			
Male	12,6	75,6	1 852
Female	9,6	78,1	1 755
Birth Order			
1	12,3	81,1	1 208
2-3	11,0	72,4	1 641
4-5	10,9	78,4	469
6+	8,0	*	289
Residence			
Urban	12,4	81,6	1 408
Rural	10,4	72,9	2 199
Region			
Central	11,6	73,8	1 284
East	14,8	83,7	331
West	7,4	81,3	1 014
South	13,9	73,0	267
Ulaanbaatar	13,1	75,3	711
Mother's Education Level			
Primary or less	6,9	*	259
Incomplete Secondary	10,3	73,2	940
Complete Secondary	12,9	77,7	1 151
More than Secondary	11,1	79,3	1 257
Total	**11,2**	**76,7**	**3 607**

*Percentage based on fewer than 25 cases.

Diarrhea Prevalence and its Treatment

The Government of Mongolia has developed the National Program Against Diarrhea and its Program of Action (1996-2000) and has been implementing it with the assistance of international organizations such as WHO and UNICEF, and also some donor countries. Also the National Program on Children's Development is being implemented by the Government and its mission is to alleviate ARI, diarrhea, and mortality of children.

Table 8.11 Percentage of Children Under Five Years of Age with Diarrhea and Bloody Diarrhea During the Two Weeks Before the Survey, According to Demographic and Background Characteristics, Mongolia 1998

Background Characteristics	Diarrhea Previous 2 Weeks	Bloody Diarrhea Previous 2 Weeks	Number of Children
Child's Age			
Under 6 Months	12,5	0,5	432
6-11 Months	12,9	1,1	365
12-23 Months	14,7	1,0	674
24-35 Months	7,4	0,9	673
36-47 Months	7,1	0,5	748
48-59 Months	4,9	0,3	715
Child's Sex			
Male	9,9	0,5	1 852
Female	8,8	0,9	1 755
Birth Order			
1	10,3	0,6	1 208
2-3	9,0	0,7	1 641
4-5	9,8	1,1	469
6+	6,9	0,7	289
Residence			
Urban	9,3	0,4	1 408
Rural	9,4	0,9	2 199
Region			
Central	9,2	0,5	1 284
East	10,3	0,9	331
West	10,3	1,0	1 014
South	6,0	1,1	267
Ulaanbaatar	9,3	0,3	711
Mother's Education Level			
Primary or less	10,0	1,5	259
Incomplete Secondary	8,5	0,6	940
Complete Secondary	9,7	0,4	1 151
More than Secondary	9,5	0,8	1 257
Total	**9,4**	**0,7**	**3 607**

The RHS inquired about diarrhea prevalence and its treatment in order to gather information to evaluate the program. Table 8.11 presents the percentage of

children under five years of age with diarrhea during the two weeks before the survey according to the child's age, sex, birth order, residence, region, and mother's educational level. Among children under 5 years of age, 9 percent had diarrhea and less than 1 percent had bloody diarrhea in the two-week period before the interview. Children under the age of 2 years are more likely to suffer from diarrhea than are older children. There is no systematic variation in diarrhea prevalence with any of the other characteristics considered in Table 8.11.

Table 8.12 Among Children Under Five Years Who Had Diarrhea in the Past Two Weeks, the Percentage Taken For Treatment to a Health Facility, and the Percentage who Received Different Types of Treatment, According to Demographic and Background Characteristics, Mongolia 1998

Background Characteristics	Percent Taken to a Health Facility	Pill or Syrup	Injection	Home Med./ Herb. Med.	Other	None	Number of Children with Diarrhea
Child's Age							
Under 6 Months	74,1	79,6	0,0	14,8	3,7	18,5	54
6-11 Months	66,0	68,1	0,0	17,0	19,1	8,5	47
12-23 Months	68,7	84,8	1,0	10,1	7,1	10,1	99
24-35 Months	66,0	86,0	2,0	10,0	16,0	6,0	50
36-47 Months	54,7	77,4	1,9	13,2	17,0	15,1	53
48-59 Months	71,4	71,4	0,0	8,6	34,3	2,9	35
Child's Sex							
Male	65,6	79,2	1,6	10,4	15,8	9,8	183
Female	68,4	79,4	0,0	14,2	11,6	11,6	155
Birth Order							
1	66,9	78,2	0,0	15,3	8,1	12,9	124
2-3	65,5	79,1	1,4	9,5	16,9	9,5	148
4-5	71,7	87,0	2,2	13,0	13,0	4,3	46
6+	*	*	*	*	*	*	20
Residence							
Urban	73,3	79,4	0,8	11,5	16,8	9,2	131
Rural	62,8	79,2	1,0	12,6	12,1	11,6	207
Region							
Central	69,5	83,1	0,8	15,3	13,6	7,6	118
East	64,7	73,5	0,0	11,8	8,8	11,8	34
West	62,5	80,8	1,0	8,7	14,4	11,5	104
South	*	*	*	*	*	*	16
Ulaanbaatar	69,7	77,3	0,0	15,2	16,7	12,1	66
Mother's Education Level							
Primary or less	50,0	73,1	0,0	3,8	11,5	19,2	26
Incomplete Secondary	60,0	81,3	0,0	12,5	11,3	10,0	80
Complete Secondary	67,0	79,5	0,9	16,1	12,5	10,7	112
More than Secondary	75,0	79,2	1,7	10,0	17,5	9,2	120
Total	**66,9**	**79,3**	**0,9**	**12,1**	**13,9**	**10,7**	**338**

*Precentage based on fewer than 25 cases

About two thirds (67 percent) of the children who had diarrhea were taken to a health facility for consultation or treatment. Table 8.12 indicates the various treatments that were given to children suffering from diarrhea. About 79 percent of

the children were given pills or syrups, while 26 percent of the children were given herbs and other treatments. Nearly 11 percent of the children with diarrhea were given nothing to treat it. Children whose mothers are better educated are more likely to be taken to a health facility than others, and are more likely to receive treatment.

It is important that children with diarrhea are given sufficient liquids to prevent dehydration. Dehydration due to diarrhea is one of the most frequent causes of child mortality throughout the world. Table 8.13 reveals that 63 percent of Mongolian children received increased fluids during their recent bout of diarrhea. What is worrying is that nearly 10 percent received a reduced amount of fluids. It is important to inform mothers that they should give more fluids to their children who are suffering from diarrhea.

Table 8.13 Provision of Fluids to Children Under Five Years Who Had Diarrhea in the Past Two Weeks, Mongolia 1998

Increase or Decrease Fluids	
Same	26,3
Increase	63,0
Decrease	9,5
DK/Missing	1,2
Total	**100,0**
Number of Children with Diarrhea	338

Summary

Overall, the primary health-care system in Mongolia appears to be functioning adequately despite recent cutbacks in funding. Among births in the past 5 years, 90 percent received antenatal care from health professionals, and only 4 percent were completely without antenatal care. Furthermore, 94 percent of births occurred in a hospital or clinic, and were attended by a health professional. Perhaps the area in which the health-care system is weakest is in combating anemia. Only 42 percent of women received iron pills during their most recent pregnancy, and only 7 percent took the pills for the recommended 3 months.

From an international perspective, Mongolian children appear to be healthy. Despite the fact that the survey was carried out in late autumn and early winter, only 11 percent of children under the age of 5 years suffered acute respiratory infections (ARI) in the two weeks prior to the survey, and only 9 percent had a bout of diarrhea. Mothers make good use of health care facilities for their children: 77 percent of children with ARI and 67 percent of children with diarrhea were taken to a health facility for consultation and/or treatment.

CHAPTER IX

BREASTFEEDING

Ariunaa Dashtseren

Breastfeeding is an important topic because infant feeding affects both the mother and the child. It affects the child through his/her nutritional status, which in turn has an effect on the risk of dying. The mother is affected through the effect of breastfeeding on the duration of postpartum infecundity, and hence on the length of the birth interval and fertility levels. These effects are influenced by both the duration and intensity of breastfeeding, and by the age when the child starts to receive supplemental foods and liquids.

Table 9.01 Percent of All Children Who Were Ever Breastfed Among Children Born in the Three Years Before the Survey, According to Background Characteristics, Mongolia, 1998

Background Characteristics	Breastfeeding		Number of Children
	Ever Breastfed	Never Breastfed	
Sex			
Male	95,8	4,2	1186
Female	97,2	2,8	1090
Residence			
Urban	96,2	3,8	906
Rural	96,6	3,4	1370
Region			
Central	95,6	4,4	837
East	96,5	3,5	199
West	97,3	2,7	625
South	99,4	0,6	169
Ulaanbaatar	96,0	4,0	446
Mother's Education Level			
Primary or Less	96,9	3,1	161
Incomplete Secondary	96,8	3,2	630
Complete Secondary	96,1	3,9	737
More than Secondary	96,5	3,5	748
Total	**96,5**	**3,5**	**2276**

Table 9.01 shows breastfeeding status of all children who were born in the three years before the survey (or in years 1995-1998), by sex, residence and mother's educational level. Over 96 percent of the children received breastmilk for some period of time. This table shows that the percentage of children who were ever breastfed does not differ much by sex, residence, region, and mother's educational level. Therefore, it can be concluded that the practice of breastfeeding is nearly universal in Mongolia.

Table 9.02 Percent Distribution of Living Children by Breastfeeding Status, According to Child's Age in Months, Mongolia, 1998

Background Characteristics	Breastfeeding Status					Living Children
	Not Breastfeeding	Exclusive Breastfed	Breast/ Plain Water	Breast/ Supplement	Total	
Months Since Birth						
0-1	1,8	88,1	0,0	10,1	100,0	109
2-3	2,6	74,7	1,3	21,4	100,0	154
4-5	3,0	37,9	2,4	56,8	100,0	169
6-7	6,0	9,3	0,0	84,7	100,0	150
8-9	8,8	7,7	0,0	83,5	100,0	91
10-11	6,5	0,8	0,0	92,7	100,0	124
12-13	7,9	0,0	0,0	92,1	100,0	101
14-15	12,6	0,0	0,0	87,4	100,0	119
16-17	18,9	0,8	0,0	80,3	100,0	127
18-19	26,2	0,8	0,0	73,0	100,0	122
20-21	26,0	0,0	0,0	74,0	100,0	104
22-23	29,7	0,0	0,0	70,3	100,0	101
24-25	46,6	0,0	0,8	52,5	100,0	118
26-27	49,2	0,0	0,0	50,8	100,0	120
28-29	64,2	0,0	0,0	35,8	100,0	106
30-31	65,0	0,0	0,0	35,0	100,0	123
32-33	75,2	0,0	0,0	24,8	100,0	109
34-35	79,4	0,0	0,0	20,6	100,0	97
Age in Months						
0-3	2,3	80,2	0,8	16,7	100,0	263
4-6	2,8	30,0	1,6	65,6	100,0	247
7-9	9,2	6,7	0,0	84,0	100,0	163
Total	**27,7**	**13,9**	**0,3**	**58,1**	**100,0**	**2144**

Table 9.02 shows breastfeeding status of living children under the age of 3 years by child's age in months. Over 88 percent of children aged 0-1 month are exclusively breasfeeding, 10 percent are receiving supplement in addition to breastfeeding, but 2 percent are not breastfeeding. The percentage of children who are breastfeeding decreases slowly with increasing age, and by the age of 1 year, 92 percent of children receive breastmilk and supplementary food. At age 26-27 months, half of children are still breastfeeding. About 80 percent of children aged 34-35 months have stopped breastfeeding.

According to the World Health Organization (WHO) recommendations, for the first four months of life a baby should be exclusively breastfed, and by 7-9 months of life all children should receive supplementation. By age 4-5 months, over half of the children (57 percent) receive supplementation; thus supplementation begins quite early in Mongolia. Looking at the summary data, 80 percent of children under four months are exclusively breastfeeding, while 17 percent receive supplements. At ages 7-9 months, only 7 percent of children are exclusively breastfeeding and 84 percent are receiving supplementary food. In general, mothers in Mongolia comply well with WHO recommendations.

Table 9.03 Median Durations of Any, Exclusive and Full Breastfeeding According to Background Characteristics, Mongolia, 1998

Background Characteristics	Median Breastfeeding Durations			Number of Children
	Breastfeeding	Exclusive Breastfeeding	Full Breastfeeding	
Sex				
Male	25,5	3,6	3,7	1186
Female	24,9	3,5	3,6	1090
Residence				
Urban	25,5	2,5	2,6	906
Rural	24,9	4,4	4,5	1370
Region				
Central	25,6	3,6	3,8	837
East	23,0	3,5	3,5	199
West	25,8	4,4	4,4	625
South	24,5	3,8	3,8	169
Ulaanbaatar	25,4	2,3	2,4	446
Mother's Education Level				
Primary or Less	25,6	4,3	4,3	161
Incomplete Secondary	22,7	3,8	3,9	630
Complete Secondary	25,8	3,4	3,5	737
More than Secondary	25,5	3,3	3,5	748
Total	**25,2**	**3,5**	**3,6**	**2276**
Mean	24,3	4,6	4,7	
Prevalence - Incidence Mean	24,2	4,7	4,8	

Table 9.03 shows median duration of breastfeeding by sex, type of residence, region and mother's educational level. The term 'exclusive' breastfeeding signifies that the child receives only breastmilk, while 'full' breastfeeding permits the child to have plain water in addition to breastmilk. The median duration of breastfeeding is 25 months. It does not vary by background characteristics. Thus, regardless of sex of the child, place of residence, region or educational level, Mongolian women on average breastfeed their children for two years. Median duration of breastfeeding is nearly the same as mean duration as well as the 'prevalence-incidence mean' duration (an epidemiological measure, explained in Chapter 5). The median duration of exclusive breastfeeding is 3.5 months. The median durations of both exclusive and full breastfeeding appear to be lower for Ulaanbaatar and other urban areas than for rural areas by about 2 months.

In Chapter 5 it was seen that the median duration of postpartum amenorrhea is 8 months. In large part this is attributable to the extended period of breastfeeding practiced by Mongolian women. In the absence of breastfeeding, postpartum infecundity normally lasts just 2-3 months.

Table 9.04 shows the percent of breastfeeding children under 36 months of age receiving supplementation by age of the child and type of supplementation. Supplementation with other liquids and other mushy food starts early. By the age of 6-7 months three fourths of the breastfeeding children receive other liquids, and four-fifths receive solid or mushy food. We can therefore conclude that breastfeeding

practices in Mongolia are good: children receive breastmilk for an extended period, and receive supplementation at an early age.

Table 9.04 Percent of Breastfeeding Children under 36 Months of Age Receiving Supplementation According to Child's Age in Months, Mongolia, 1998

Age in Months	Type of Supplementation				Breastfeeding Children
	Plain Water	Milk	Other Liquid	Solid/Mushy Food	
Months Since Birth					
0-1	2,8	4,7	5,6	1,9	107
2-3	6,7	12,7	12,0	5,3	150
4-5	15,2	36,0	36,6	37,8	164
6-7	27,7	35,5	75,9	80,9	141
8-9	36,1	36,1	81,9	85,5	83
10-11	39,7	33,6	90,5	98,3	116
12-13	40,9	48,4	90,3	95,7	93
14-15	32,7	50,0	91,3	99,0	104
16-17	46,6	52,4	94,2	99,0	103
18-23	45,4	55,0	91,6	97,9	238
24-29	45,7	53,7	93,8	99,4	162
30-35	48,9	48,9	97,8	97,8	90
Age in Months					
0-3	5,1	9,3	9,3	3,9	257
4-6	19,6	35,8	47,9	50,4	240
7-9	31,8	35,8	81,1	85,1	148
Total	**32,2**	**39,7**	**70,8**	**74,0**	**1551**

CHAPTER X

KNOWLEDGE AND ATTITUDES CONCERNING AIDS

Munkhtsetseg Pooloi

Introduction

In 1992, the first national program against the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) was developed in Mongolia. HIV, AIDS, and STDs (Sexually Transmitted Diseases) are important health concerns, and as a response the Government of Mongolia in established the National AIDS Committee headed by the Prime Minister of Mongolia, and the National Program Against HIV and AIDS was approved by this Committee. In Mongolia there have been very few reported cases of HIV/AIDS, but a fairly high prevalence of other STDs. However, this survey addresses only knowledge and attitudes concerning AIDS.

Knowledge

Table 10.01 shows the percentage of women by knowledge of AIDS and by source of knowledge according to age, marital status, residence, region, and educational level. According to Table 10.01, 96 percent of women have heard about AIDS, and most of the women heard from mass media, such as TV, radio, and newspapers.

Apart from hearing about AIDS from TV, radio and newspapers, many adolescents (women ages 15-19) hear from friends and relatives (25 percent) and school (19 percent) and somewhat fewer receive information from health workers. In the future it would be better if the health workers could cover more adolescents in their information and education activities.

Looking at current marital status, never married women are more likely to hear from friends and relatives, health workers, and schools in addition to hearing from radio, TV, and newspapers. Urban women are more likely to hear about AIDS from any source of information than rural women are. Women from Ulaanbaatar hear about AIDS from a mean of 3,5 different sources while women from East and West regions hear from only 2,5 sources. The level of hearing about AIDS from TV is low for women from West region compared with other regions. The percentage of women hearing about AIDS increases with increase in educational level. Women with higher than secondary education hear about AIDS from the highest mean number of sources (3,4) while women with primary education hear from the lowest number, or 2,1 sources.

Table 10.01 Percentage of Women by Knowledge of AIDS and by Source of Knowledge, and Mean Number of Sources Cited, According to Background Characteristics, Mongolia, 1998

Background Characteristics	Knows AIDS	Sources of AIDS Information											Total	Mean
		Radio	TV	Newspapers	Pamphlets	Health Worker	Mosque, Church	School	Community Meetings	Friends, Relatives	Work Place	Other Sources		
Age group														
15-19	92,5	63,7	74,9	58,5	7,9	15,0	0,5	19,2	3,1	25,1	0,5	0,3	1 273	2,9
20-24	95,8	73,1	73,6	71,2	11,7	16,2	0,3	5,6	2,5	24,6	5,0	0,2	1 343	3,0
25-29	97,2	75,4	73,6	73,1	11,9	16,8	0,1	1,9	2,2	20,9	6,7	0,1	1 351	2,9
30-39	97,1	77,5	78,8	71,3	12,7	19,9	0,2	1,1	3,3	18,5	9,4	0,2	2 306	3,0
40-49	96,7	78,9	80,2	70,8	11,7	18,5	0,2	0,8	3,0	17,0	11,4	0,1	1 188	3,0
Current Marital Status														
Currently Married	97,0	76,8	76,1	71,5	11,9	18,2	0,1	1,6	2,8	18,9	8,0	0,2	4 899	2,9
Formerly Married	97,4	72,8	81,9	74,8	13,4	17,9	0,3	1,9	2,1	20,9	9,1	0,3	580	3,0
Never Married	93,1	68,1	75,9	62,4	9,5	16,1	0,5	14,6	3,2	25,9	3,4	0,2	1 982	3,0
Residence														
Urban	99,2	76,8	95,1	78,3	16,3	18,7	0,3	7,2	3,7	23,8	9,5	0,3	3 904	3,3
Rural	92,5	71,4	56,0	59,5	6,0	16,4	0,2	2,8	2,0	17,8	4,0	0,1	3 557	2,6
Region														
Central	94,7	70,2	73,1	68,6	12,0	21,6	0,2	4,5	2,1	24,8	6,5	0,2	2 576	3,0
East	96,0	71,1	67,6	61,4	4,6	10,9	0,0	2,5	2,4	10,6	4,1	0,1	678	2,5
West	93,0	72,4	60,6	59,0	4,2	15,0	0,1	2,4	2,5	14,7	4,2	0,0	1 569	2,5
South	96,1	81,4	65,6	60,8	10,4	12,3	0,0	3,5	2,2	13,6	2,8	0,2	462	2,6
Ulaanbaatar	99,8	79,7	97,0	82,0	18,2	18,0	0,4	9,0	4,3	25,6	11,0	0,3	2 176	3,5
Highest Education Level														
Primary or Less	80,9	61,7	40,5	34,7	1,7	7,7	0,0	4,1	1,1	15,0	1,0	0,1	813	2,1
Incomplete Secondary	94,8	71,2	65,7	56,6	5,4	14,6	0,1	7,4	1,7	18,2	2,4	0,1	1 835	2,6
Complete Secondary	98,8	74,4	83,7	76,6	12,5	16,8	0,5	6,6	2,6	23,1	4,0	0,2	2 215	3,0
More than Secondary	99,2	80,0	89,2	83,0	17,7	23,5	0,2	2,6	4,5	22,8	14,4	0,3	2 598	3,4
Total	**96,0**	**74,2**	**76,5**	**69,3**	**11,4**	**17,6**	**0,2**	**5,1**	**2,9**	**20,9**	**6,9**	**0,2**	**7 461**	**3,0**

Note: Percentages sum to more than 100% because of multiple responses.

Prevention

Table 10.02 shows the percentage of women who know of AIDS by knowledge of ways to avoid AIDS, and with misinformation by age, current marital status, residence, region and educational level. Nearly 6 percent of women stated that there is no way to avoid AIDS. Among those women who stated there is a way to avoid AIDS, 62 percent stated that people should have only one sex partner and 41 percent stated that the use of condoms are ways to avoid AIDS. These figures show that women in Mongolia have very good knowledge about how to avoid AIDS.

By age, 23 percent of women of ages 15-19 stated that abstaining from sex is one of the ways to avoid AIDS, which is not a bad answer for single women. Some 47 percent of women aged 20-24 chose condoms as the way to avoid AIDS, a higher percentage than in other age groups. For the remaining age groups (25 and over), by far the most common response was to restrict sex to one partner.

Currently married women considered having one sexual partner (77 percent) as a way to avoid AIDS, while divorced and widowed women considered use of condoms (60 percent) as the way to avoid AIDS. The percentage of women who stated that there is no way to avoid AIDS is greater for rural women by 5 percent compared with that for urban women. The percentage of women stating use of condoms as the way to avoid AIDS is lower for rural women than for urban women. Similarly, the percentages of women who stated avoiding transfusions and injections are lower for rural women.

Looking at region of residence, 10 percent of women of East region stated that there is no way to avoid AIDS, compared to only 2 percent of women in Ulaanbaatar. Nearly 53 percent of women of Ulaanbaatar cited the use of condoms, and 64 percent stated having one sex partner, were ways to avoid AIDS; these percentages are higher than those of other regions.

By educational level, 12 percent of women with primary education, and only 3 percent of women with vocational or higher education stated that there is no way to avoid AIDS. The percentage of women stating particular ways of avoiding AIDS increases with increasing level of education (except for abstaining from sex). From this it can be concluded that women with lower education have less knowledge concerning ways to avoid AIDS.

Table 10.02 Percentage of Women who Know of AIDS by Knowledge of Ways to Avoid AIDS, and With Misinformation, According to Background Characteristics, Mongolia 1998

Background Characteristics	Ways to Avoid AIDS									
	No Way to Avoid	Abstain from Sex	Use Condoms	One Sex Partner	Avoid Sex Prostit.	Avoid Sex Homosex.	Avoid Transfusions	Avoid Injections	Misinformation* Percent	Number of cases
Age group										
15-19	6,6	22,9	39,6	28,2	3,1	2,8	13,4	11,9	4,8	1 178
20-24	7,1	7,1	47,1	58,9	4,4	2,8	11,3	11,0	4,6	1 286
25-29	5,0	3,2	43,5	71,2	5,6	3,0	13,4	13,1	4,7	1 313
30-39	5,3	3,5	41,6	71,4	4,4	2,6	13,0	12,3	4,3	2 238
40-49	4,6	6,2	32,1	71,5	4,0	1,7	14,0	11,7	4,6	1 149
Current Marital Status										
Currently Married	4,9	1,6	36,8	77,1	4,3	2,5	12,7	12,0	4,5	4 753
Formerly Married	6,9	15,8	60,7	36,3	5,0	2,3	14,2	12,0	3,5	565
Never Married	7,2	21,0	46,2	31,0	4,2	3,0	13,5	12,3	5,0	1 846
Residence										
Urban	3,2	8,5	48,3	62,8	5,0	2,9	16,9	16,2	5,4	3 873
Rural	8,6	6,8	32,6	61,1	3,6	2,3	8,4	7,2	3,5	3 291
Region										
Central	7,3	8,3	37,4	62,2	5,0	3,3	12,8	10,7	4,5	2 439
East	4,8	1,5	45,8	51,9	1,5	0,9	7,4	6,8	2,8	651
West	6,7	8,0	30,9	63,1	2,5	1,0	6,6	7,1	4,0	1 459
South	10,1	5,9	30,6	61,5	5,9	2,7	7,4	8,8	1,8	444
Ulaanbaatar	2,4	9,1	52,8	64,3	5,4	3,5	20,4	19,2	6,1	2 171
Highest Education Level										
Primary or Less	11,9	11,4	21,0	44,8	3,0	1,1	7,3	6,4	1,5	658
Incomplete Secondary	8,9	10,2	34,3	51,4	3,3	2,2	9,4	8,8	4,0	1 739
Complete Secondary	4,4	7,9	46,2	61,6	4,2	2,5	11,7	10,7	4,3	2 189
More than Secondary	3,0	4,9	46,4	74,0	5,5	3,4	18,0	16,8	5,9	2 578
Total	**5,7**	**7,7**	**41,1**	**62,0**	**4,3**	**2,6**	**13,0**	**12,0**	**4,6**	**7 164**

*Note: A woman is classified as having misinformation if she responded any of the following: avoid kissing, avoid mosquito bites, seek protection from traditional healer, or other. Percentages sum to more than 100% because of multiple responses.

Perceived Risks

Table 10.03 gives the percentage distribution of women who know of AIDS by perceived risks of AIDS such as "can a healthy looking person have AIDS?", "is AIDS a fatal disease?", and "what is your chance of getting AIDS?" by age, current marital status, residence, region and educational level. Nearly 33 percent of women who know of AIDS answered "no", 54 percent "yes", and 14 percent "do not know" to the question of "Can a healthy looking person have AIDS?" The correct answer, of course, is "yes". If we look by regions, only 41 percent of women in West region stated that a healthy looking person can have AIDS. On the other hand, 65 percent of women from Ulaanbaatar stated that a healthy looking person can have AIDS. If we look by educational level, only 36 percent of women with primary education answered "yes" in comparison with 62 percent women with vocational or higher education. To the question "Is AIDS a fatal disease?", 2 percent of all women answered "almost never", 36 percent "sometimes", 58 percent "almost always" and 4 percent "do not know". To the question of her own chance of getting AIDS, 75 percent of women answered that they have "no risk at all", 17 percent have "small risk", 3 percent have "moderate" risk, 1 percent have "great" risk and 4 percent answered "do not know".

From this table one can conclude that many women's knowledge about AIDS is faulty, particularly because 33 percent of women stated that a healthy looking person cannot have AIDS, and only 58 percent of women stated that AIDS is almost always a fatal disease.

Table 10.03 Percentage Distributions of Women who Know of AIDS by Perceived Risks of AIDS, According to Background Characteristics, Mongolia 1998

Background Characteristics	Can a Healthy Person Have AIDS				Is AIDS a Fatal Disease					Respondent's Chance of Getting AIDS						Number of Cases
	No	Yes	DK/ Missing	Total	Almost Never	Sometimes	Almost Always	DK/ Missing	Total	No Risk at All	Small	Moderate	Great	DK/ Missing	Total	
Age group																
15-19	33,6	49,6	16,8	100,0	2,5	41,3	51,7	4,6	100,0	74,4	15,0	3,6	1,0	5,9	100,0	1 178
20-24	33,2	53,5	13,3	100,0	2,2	39,7	54,1	4,0	100,0	71,9	19,8	3,6	0,5	4,3	100,0	1 286
25-29	32,7	54,0	13,3	100,0	2,5	35,6	58,6	3,2	100,0	73,3	19,2	3,0	0,8	3,6	100,0	1 313
30-39	31,9	55,9	12,3	100,0	1,5	33,8	61,2	3,5	100,0	74,9	16,7	4,2	0,9	3,3	100,0	2 238
40-49	32,6	54,0	13,4	100,0	0,9	30,6	64,4	4,1	100,0	79,6	15,0	1,7	0,5	3,1	100,0	1 149
Current Marital Status																
Currently Married	33,0	54,0	13,0	100,0	1,7	34,0	60,6	3,7	100,0	76,6	16,2	3,3	0,7	3,3	100,0	4 753
Formerly Married	26,2	59,1	14,7	100,0	0,9	35,4	59,8	3,9	100,0	69,9	21,4	3,4	0,9	4,4	100,0	565
Never Married	33,8	51,5	14,7	100,0	2,4	41,0	52,4	4,1	100,0	71,5	18,5	3,6	0,9	5,5	100,0	1 846
Residence																
Urban	27,2	61,0	11,8	100,0	1,4	32,1	63,6	2,9	100,0	73,6	19,1	3,5	0,9	3,0	100,0	3 873
Rural	39,1	45,2	15,7	100,0	2,4	40,4	52,3	4,9	100,0	76,1	14,9	3,2	0,6	5,0	100,0	3 291
Region																
Central	32,0	54,2	13,8	100,0	2,5	35,8	58,0	3,7	100,0	79,2	14,4	2,5	0,6	3,3	100,0	2 439
East	40,7	43,3	16,0	100,0	1,7	41,0	53,6	3,7	100,0	70,4	18,3	5,4	1,2	4,8	100,0	651
West	42,8	40,8	16,4	100,0	1,9	40,8	51,3	6,1	100,0	72,3	16,4	4,0	1,2	6,0	100,0	1 459
South	30,6	55,2	14,2	100,0	2,9	37,4	56,5	3,2	100,0	80,0	13,5	2,3	0,2	4,1	100,0	444
Ulaanbaatar	24,6	64,8	10,6	100,0	1,0	31,0	65,5	2,6	100,0	71,7	21,1	3,5	0,7	3,0	100,0	2 171
Highest Education Level																
Primary or Less	41,5	36,2	22,3	100,0	2,1	42,7	46,4	8,8	100,0	77,2	11,6	3,3	0,8	7,1	100,0	658
Incomplete Secondary	36,1	46,5	17,4	100,0	2,5	39,6	52,7	5,2	100,0	73,5	17,5	2,6	0,6	5,8	100,0	1 739
Complete Secondary	32,3	54,7	13,0	100,0	1,7	35,9	59,6	2,9	100,0	74,8	17,5	3,4	0,7	3,5	100,0	2 189
More than Secondary	28,4	62,3	9,3	100,0	1,5	31,7	64,4	2,4	100,0	74,9	18,1	3,8	0,9	2,3	100,0	2 578
Total	**32,6**	**53,8**	**13,6**	**100,0**	**1,9**	**35,9**	**58,4**	**3,8**	**100,0**	**74,7**	**17,2**	**3,4**	**0,8**	**3,9**	**100,0**	**7 164**

Behavioral Change

Table 10.04 shows the percentage of women who know of AIDS by changes in behavior in order to avoid AIDS, by age, current marital status, residence, region, and educational level. Over 81 percent of women who know of AIDS, reported no change in sexual behavior, and 16 percent of women had not entered into sexual relations, i.e. had kept their virginity, which presumably is not a behavioral change. Only 3 percent of women changed sexual behavior, and most of them started to use condoms. Almost 74 percent of women aged 15-19 years, and 60 percent of unmarried women had not yet had sexual relations. The percentage of women who changed sexual behavior is somewhat greater in urban areas that in rural areas, and increases with educational level.

Table 10.04 Percentage of Women Who Know of AIDS by Changes in Behavior in Order to Avoid AIDS, According to Background Characteristics, Mongolia 1998

Background Characteristics	Sex Behavior No Changes	Kept Virginity	Changed Sexual Behavior					Number of Cases
			Stopped Sex	Began Using Condoms	Restrict One Partner	Fewer Partners	Other	
Age group								
15-19	25,7	73,6	0,3	0,2	0,2	0,2	0,0	1 178
20-24	79,4	16,6	0,5	2,3	1,2	0,5	0,2	1 286
25-29	94,9	1,8	0,5	1,7	0,7	0,3	0,1	1 313
30-39	95,8	0,3	0,7	2,2	0,8	0,3	0,2	2 238
40-49	96,5	0,1	1,2	1,0	0,3	0,1	0,3	1 149
Current Marital Status								
Currently Married	98,4	0,0	0,1	1,0	0,4	0,0	0,1	4 753
Formerly Married	86,5	0,0	4,4	5,3	1,8	1,8	0,7	565
Never Married	35,6	60,1	0,9	2,1	1,0	0,5	0,2	1 846
Residence								
Urban	77,9	17,7	0,8	2,4	1,0	0,3	0,3	3 873
Rural	85,3	12,9	0,4	0,7	0,3	0,2	0,0	3 291
Region								
Central	83,7	13,4	0,5	1,4	0,7	0,4	0,2	2 439
East	84,3	13,5	0,3	1,2	0,3	0,5	0,0	651
West	80,1	18,1	0,7	0,5	0,3	0,0	0,0	1 459
South	88,1	9,9	0,9	0,7	0,2	0,2	0,2	444
Ulaanbaatar	77,1	17,9	0,9	2,9	1,2	0,3	0,3	2 171
Highest Education Level								
Primary or Less	69,8	28,6	0,8	0,5	0,2	0,3	0,0	658
Incomplete Secondary	71,7	26,2	0,6	0,5	0,2	0,4	0,1	1 739
Complete Secondary	78,3	18,5	0,3	1,9	1,1	0,4	0,1	2 189
More than Secondary	93,3	2,4	0,9	2,4	0,8	0,2	0,3	2 578
Total	**81,3**	**15,5**	**0,6**	**1,6**	**0,7**	**0,3**	**0,2**	**7 164**

Note: Percentages sum to more than 100% because of multiple responses.

Summary

Most women in Mongolia (96 percent) have heard of the disease called AIDS. The most common sources of knowledge are television, radio and newspapers. Most of these women also know how to avoid AIDS, the most common responses being to restrict sex to one partner and/or to use condoms. However, concerning the risks of AIDS, many women have faulty knowledge: one-third stated that a healthy looking person cannot have AIDS, and only slightly more than half thought that AIDS is almost always fatal. Only a small fraction of women (3 percent) have changed their behavior for fear of AIDS.

CHAPTER XI

UNWANTED PREGNANCY AND ABORTION

Baatarchuluun Chagnaadorj

The RHS gathered information on unwanted pregnancy and abortion, two reproductive health issues that attract great attention. Each woman was asked *whether* she has had an unwanted pregnancy at any time, *when* she had the last unwanted pregnancy, whether she did something to *stop* the unwanted pregnancy, who *helped* her to stop the unwanted pregnancy, and whether she had any *health problems* in trying to stop the unwanted pregnancy. In 1998, according to the statistics of the Ministry of Health and Social Welfare (MOHSW), 9135 abortions were reported in Mongolia, representing one abortion per 5 live births. In the Population Policy of the Mongolian Government it is stated that "Use of abortion as a method to avoid unwanted pregnancy should not be encouraged; abortion should be performed on the basis of permission from hospitals and family members for the sake of their well being, and in safe medical conditions…" One of the objectives of the National Reproductive Health Program that was approved by the Government of Mongolia in 1997 is to reduce abortions.

Table 11.01 shows the percentage of women who have had an unwanted pregnancy, and among those with an unwanted pregnancy, the percentage distribution by time since last unwanted pregnancy, and action to end pregnancy according to current age, current marital status, residence, region, and educational level. About 19 percent of women, or one out of every five, have had an unwanted pregnancy. The percentage increases with age, reaching 30 percent among women aged 35-49. Unwanted pregnancy was two times higher among women with higher or vocational education compared to those with incomplete secondary or less education. It may be because women with higher education normally want fewer children. About 45 percent of women who have had an unwanted pregnancy last had it five or more years ago, 41 percent one to four years ago, and 14 percent had it within the last year. This may reflect that the level of use of methods of family planning has been increasing over the last few years. About 65 percent of women with an unwanted pregnancy took action to stop the last unwanted pregnancy, either successfully or unsuccessfully, while 35 percent continued the last unwanted pregnancy. The percentage of women who stopped their last unwanted pregnancy was over two times higher for urban women (80 percent) than for rural women (36 percent). It can be explained by the better availability of services to stop unwanted pregnancies in Ulaanbaatar or in aimag centers compared with rural areas. This high percentage for urban women who stopped their last unwanted pregnancy must be affected by the highest percentage for Ulaanbaatar City (86 percent). The percentage of women who stopped the last unwanted pregnancy was 2.5 times higher for women with higher or vocational education than for women who had incomplete secondary education or less. This may be associated with the fact that women with higher education have better knowledge and possibilities to stop unwanted pregnancies.

Table 11.01 Percentage Distribution of Women Who Have Had an Unwanted Pregnancy, and Among Those with an Unwanted Pregnancy, the Percentage Distribution by Time Since Last Unwanted Pregnancy and Action to End Pregnancy, According to Current Age, Current Marital Status, Residence, Region, and Education, Mongolia, 1998

Background Characteristics	Ever Had Unwanted Pregnancy				Time Since Last Unwanted Pregnancy				Action to Stop Last Unwanted Pregnancy				
	Yes	No	Total	Total Number of Women	Less than 1 Year	1-4 Years	5 or More Years	Total	Stopped Pregnancy	Attempted but Failed	Continued Pregnancy	Total	Number of Women
Current Age													
15-24	5,7	94,3	100,0	2 616	26,7	69,3	4,0	100,0	46,0	0,0	54,0	100,0	150
25-29	18,5	81,5	100,0	1 351	23,6	54,8	21,6	100,0	62,0	2,8	35,2	100,0	250
30-34	25,5	74,5	100,0	1 182	17,9	43,9	38,2	100,0	66,4	2,7	30,9	100,0	301
35-39	30,9	69,1	100,0	1 124	10,1	37,5	52,4	100,0	67,7	0,6	31,7	100,0	347
40-49	29,1	70,9	100,0	1 188	2,9	21,1	76,0	100,0	66,2	1,2	32,7	100,0	346
Current Marital Status													
Currently Married	23,5	76,5	100,0	4 899	15,0	39,7	45,2	100,0	66,7	1,5	31,8	100,0	1 150
Formerly Married	26,9	73,1	100,0	580	5,8	42,9	51,3	100,0	59,6	1,3	39,1	100,0	156
Never Married	4,4	95,6	100,0	1 982	18,2	59,1	22,7	100,0	31,8	2,3	65,9	100,0	88
Residence													
Urban	22,5	77,5	100,0	3 904	14,7	40,5	44,8	100,0	80,3	1,3	18,5	100,0	878
Rural	14,5	85,5	100,0	3 557	13,4	42,6	44,0	100,0	35,5	1,9	62,6	100,0	516
Region													
Central	15,6	84,4	100,0	2 576	14,4	40,0	45,7	100,0	58,6	1,5	40,0	100,0	403
East	22,9	77,1	100,0	678	9,7	41,9	48,4	100,0	52,9	0,0	47,1	100,0	155
West	14,8	85,2	100,0	1 569	15,1	40,5	44,4	100,0	30,2	5,6	64,2	100,0	232
South	14,7	85,3	100,0	462	19,1	44,1	36,8	100,0	58,8	0,0	41,2	100,0	68
Ulaanbaatar	24,6	75,4	100,0	2 176	14,4	42,2	43,5	100,0	85,8	0,4	13,8	100,0	536
Highest Education Level													
Incomplete Secondary or Less	12,6	87,4	100,0	2 648	12,0	44,7	43,2	100,0	31,8	1,8	66,4	100,0	333
Complete Secondary	16,2	83,8	100,0	2 215	18,2	40,2	41,6	100,0	63,7	2,0	34,4	100,0	358
More than Secondary	27,1	72,9	100,0	2 598	13,2	40,3	46,5	100,0	78,8	1,1	20,1	100,0	703
Total	**18,7**	**81,3**	**100,0**	**7 461**	**14,2**	**41,3**	**44,5**	**100,0**	**63,7**	**1,5**	**34,8**	**100,0**	**1 394**

It is of interest to estimate the number of abortions in the 12 months prior to the month of interview. This is achieved by multiplying the number of abortions recorded in the RHS by the inverse of the product of the sampling fraction and the response rate. The resulting figure is about midway between 12,500 and 13,000 abortions during the 12-month period. This is a substantially higher estimate than the figure of 9135 abortions recorded for 1998 by the MOHSW; it may be due to the exclusion of private-sector abortions from the Ministry's statistic.

Table 11.02 shows the percentage distributions of women who have had an unwanted pregnancy by age, number of living children, and marital status at last unwanted pregnancy by current age, current marital status, residence, region and educational level. If we look at age, 44 percent of last unwanted pregnancies occurred to women aged 30 and over, and only 5 percent of last unwanted pregnancies occurred to women under the age of 20. The mean age at last unwanted pregnancy is equal to 28,7 years. This means that unwanted pregnancies are more likely to occur among older women. Most of the women (70 percent) had two or more children at the time of the last unwanted pregnancy. In general, women had on average 2,6 children when they had the last unwanted pregnancy. This tells us that in general these women want to have 2 to 3 children. But the mean number of children at last unwanted pregnancy is 2,4 for urban and 3,1 for rural areas. Most of the women (92 percent) were married or ever married at the time of the last unwanted pregnancy.

Table 11.03 shows the percentage distribution of women who induced or attempted an abortion by type of action taken according to current age, current marital status, residence, region and educational level. Almost 96 percent of women who induced or attempted an abortion relied on dilation and curettage or suction (vacuum aspiration) and 2 percent used a tablet, and these were the most common types of action. (Due to an oversight, the questionnaire did not distinguish between dilation and curettage, on the one hand, and vacuum aspiration, on the other; however, the former operation is much more common in Mongolia than the latter.) Types of action to induce or attempt an abortion other than dilation or suction are more common for rural women than for urban women, and for women with less than completed secondary education.

Table 11.02 Percentage Distributions of Women Who Have Had an Unwanted Pregnancy by Age, Number of Living Children and Marital Status at Last Unwanted Pregnancy, According to Current Age, Current Marital Status, Residence, Region and Education, Mongolia, 1998

Background Characteristics	Age at Last Unwanted Pregnancy						Number of Living Children at Last Unwanted Pregnancy							Marital Status at Last Unwanted Pregnancy			
	Less than 20	20-24	25-29	30+	Total	Mean	None	1	2	3	4+	Total	Mean	Single	Ever Married	Total	Number
Current Age																	
15-24	36,0	64,0	-	-	100,0	20,1	47,3	42,7	9,3	0,7	0,0	100,0	0,6	41,3	58,7	100,0	150
25-29	3,2	53,6	43,2	-	100,0	24,0	13,2	42,8	33,6	8,4	2,0	100,0	1,4	10,0	90,0	100,0	250
30-34	2,0	17,6	45,8	34,6	100,0	27,8	2,7	23,9	42,5	19,6	11,3	100,0	2,2	4,3	95,7	100,0	301
35-39	0,9	7,5	25,1	66,6	100,0	31,1	1,4	13,0	26,8	23,6	35,2	100,0	3,1	2,9	97,1	100,0	347
40-49	0,6	3,8	15,3	80,3	100,0	34,2	0,6	3,2	14,7	24,9	56,6	100,0	4,3	2,0	98,0	100,0	346
Current Marital Status																	
Currently Married	3,0	22,5	29,0	45,4	100,0	29,1	4,5	21,7	27,2	19,6	27,0	100,0	2,8	2,2	97,8	100,0	1 150
Formerly Married	5,1	19,9	23,7	51,3	100,0	29,3	6,4	22,4	29,5	14,1	27,6	100,0	2,7	2,6	97,4	100,0	156
Never Married	34,1	36,4	17,0	12,5	100,0	22,5	64,8	17,0	12,5	2,3	3,4	100,0	0,7	100,0	0,0	100,0	88
Residence																	
Urban	3,6	22,0	28,9	45,4	100,0	29,0	8,1	24,4	29,5	18,8	19,2	100,0	2,4	6,7	93,3	100,0	878
Rural	7,9	25,0	25,6	41,5	100,0	28,2	9,3	16,5	21,5	16,3	36,4	100,0	3,1	11,2	88,8	100,0	516
Region																	
Central	3,7	25,3	29,0	41,9	100,0	28,7	8,7	18,9	22,8	18,4	31,3	100,0	2,9	6,0	94,0	100,0	403
East	6,5	25,2	27,7	40,6	100,0	28,2	7,1	13,5	27,7	18,7	32,9	100,0	3,0	8,4	91,6	100,0	155
West	8,6	19,0	26,7	45,7	100,0	29,0	9,1	14,7	23,3	14,7	38,4	100,0	3,1	12,5	87,5	100,0	232
South	11,8	23,5	25,0	39,7	100,0	27,7	5,9	25,0	20,6	27,9	20,6	100,0	2,7	17,6	82,4	100,0	68
Ulaanbaatar	3,7	22,6	27,4	46,3	100,0	28,8	9,0	28,2	31,2	17,4	14,4	100,0	2,1	7,3	92,7	100,0	536
Highest Education Level																	
Incomplete Secondary or Less	11,1	19,8	19,2	49,8	100,0	29,0	9,9	13,5	14,1	14,7	47,7	100,0	3,6	15,0	85,0	100,0	333
Complete Secondary	5,0	32,1	31,0	31,8	100,0	27,0	12,6	23,5	29,3	15,1	19,6	100,0	2,3	10,9	89,1	100,0	358
More than Secondary	2,6	20,1	30,0	47,4	100,0	29,4	5,8	24,2	31,0	20,8	18,2	100,0	2,4	4,0	96,0	100,0	703
Total	**5,2**	**23,1**	**27,7**	**44,0**	**100,0**	**28,7**	**8,5**	**21,4**	**26,5**	**17,9**	**25,6**	**100,0**	**2,6**	**8,4**	**91,6**	**100,0**	**1 394**

Table 11.03 Percentage Distribution of Women Who Induced or Attempted an Abortion by Type of Action Taken, According to Current Age, Current Marital Status, Residence, Region and Education, Mongolia, 1998

Background Characteristics	Action Taken									
	Herbs	Tablet	Massage/ Squeezing Abdomen	Injection	Dilation/ Suction	Object in Womb	Other	DK/Missing	Total	Number
Current Age										
15-24	0,0	0,0	0,0	0,0	98,6	0,0	1,4	0,0	100,0	69
25-29	1,2	3,1	0,0	0,0	94,4	0,0	0,6	0,6	100,0	162
30-34	1,4	2,9	0,0	0,5	94,2	0,0	1,0	0,0	100,0	208
35-39	0,8	1,3	0,0	0,0	97,5	0,4	0,0	0,0	100,0	237
40-49	0,0	1,7	0,9	0,9	94,8	0,0	1,7	0,0	100,0	233
Current Marital Status										
Currently Married	0,8	2,2	0,3	0,4	95,5	0,1	0,8	0,0	100,0	784
Formerly Married	1,1	1,1	0,0	0,0	96,8	0,0	0,0	1,1	100,0	95
Never Married	0,0	0,0	0,0	0,0	93,3	0,0	6,7	0,0	100,0	30
Residence										
Urban	0,6	1,7	0,1	0,3	96,6	0,0	0,6	0,1	100,0	716
Rural	1,6	3,1	0,5	0,5	91,7	0,5	2,1	0,0	100,0	193
Region										
Central	0,0	1,7	0,0	0,4	95,9	0,4	1,2	0,4	100,0	242
East	0,0	0,0	1,2	0,0	98,8	0,0	0,0	0,0	100,0	82
West	6,0	9,6	0,0	1,2	78,3	0,0	4,8	0,0	100,0	83
South	0,0	0,0	0,0	0,0	100,0	0,0	0,0	0,0	100,0	40
Ulaanbaatar	0,4	1,3	0,2	0,2	97,6	0,0	0,2	0,0	100,0	462
Highest Education Level										
Incomplete Secondary or Less	1,8	3,6	0,9	0,9	89,3	0,0	2,7	0,9	100,0	112
Complete Secondary	0,9	1,7	0,0	0,4	96,2	0,0	0,9	0,0	100,0	235
More than Secondary	0,5	1,8	0,2	0,2	96,6	0,2	0,5	0,0	100,0	562
Total	**0,8**	**2,0**	**0,2**	**0,3**	**95,6**	**0,1**	**0,9**	**0,1**	**100,0**	**909**

Table 11.04 gives the percentage distribution of women who induced or attempted abortion by type of person who assisted according to current age, current marital status, residence, region, and educational level. The action of inducing an abortion, particularly dilation and curettage, should take place in a hygienically safe situation and with the assistance of medical personnel, and this will help to reduce difficulties during the inducing of an abortion, and reduce complications later. Therefore, the type of person who assisted with the abortion is an important indicator. About 92 percent of women who induced or attempted an abortion received assistance from a gynecologist, 4 percent from some other doctor and 1 percent from a professional midwife.

Table 11.04 Percentage Distribution of Women Who Induced or Attempted an Abortion by Type of Person Who Assisted, According to Current Age, Current Marital Status, Residence, Region and Education, Mongolia, 1998

Background Characteristics	Assistance									Number
	Gynecologist	Other Doctor	Prof. Midwife	Other Midwife	Medical Assistant	Tradit. Healer	No One	Other	Total	
Current Age										
15-24	91,3	2,9	2,9	0,0	1,4	0,0	1,4	0,0	100,0	69
25-29	90,7	4,9	1,2	0,6	0,0	0,6	0,6	1,2	100,0	162
30-34	89,9	4,3	1,4	1,0	0,5	0,0	1,4	1,4	100,0	208
35-39	92,4	3,4	1,7	0,4	0,4	0,0	1,7	0,0	100,0	237
40-49	94,0	2,1	0,4	0,0	0,4	0,4	1,7	0,9	100,0	233
Current Marital Status										
Currently Married	92,2	3,4	1,1	0,5	0,4	0,3	1,3	0,8	100,0	784
Formerly Married	88,4	5,3	2,1	0,0	1,1	0,0	2,1	1,1	100,0	95
Never Married	93,3	0,0	3,3	0,0	0,0	0,0	3,3	0,0	100,0	30
Residence										
Urban	92,5	3,5	1,3	0,1	0,4	0,3	1,3	0,7	100,0	716
Rural	89,6	3,6	1,6	1,6	0,5	0,0	2,1	1,0	100,0	193
Region										
Central	90,9	4,1	0,8	1,2	0,8	0,0	1,2	0,8	100,0	242
East	96,3	3,7	0,0	0,0	0,0	0,0	0,0	0,0	100,0	82
West	80,7	2,4	3,6	1,2	0,0	1,2	7,2	3,6	100,0	83
South	95,0	5,0	0,0	0,0	0,0	0,0	0,0	0,0	100,0	40
Ulaanbaatar	93,3	3,2	1,5	0,0	0,4	0,2	0,9	0,4	100,0	462
Highest Education Level										
Incomplete Secondary or Less	90,2	2,7	0,9	0,9	0,9	0,0	3,6	0,9	100,0	112
Complete Secondary	90,2	3,8	2,1	0,9	0,9	0,4	0,9	0,9	100,0	235
More than Secondary	92,9	3,6	1,1	0,2	0,2	0,2	1,2	0,7	100,0	562
Total	**91,9**	**3,5**	**1,3**	**0,4**	**0,4**	**0,2**	**1,4**	**0,8**	**100,0**	**909**

Table 11.05 shows the percentage distribution of women who induced or attempted an abortion by type of action taken and person giving assistance. Nearly all women (99 percent) who were assisted by a gynecologist were aborted by dilation or suction, while 20 percent of women who were assisted by someone other than a gynecologist took tablets, 8 percent took herbs, and 61 percent were aborted by dilation or suction. These figures show that it is non-professionals who undertake abortion by means other than dilation or suction.

Table 11.05 Percentage Distribution of Women Who Induced or Attempted an Abortion by Type of ActionTaken, According to Type of Person Giving Assistance, Mongolia, 1998

	Assistance		
	Gynecologist	Other	All Women
Action Taken			
Herbs	0,1	8,1	0,8
Tablet	0,4	20,3	2,0
Massage/Squeezing Abdomen	0,1	1,4	0,2
Injection	0,4	0,0	0,3
Dilation/Suction	98,7	60,8	95,6
Object in Womb	0,0	1,4	0,1
Other	0,4	6,8	0,9
DK/Missing	0,0	1,4	0,1
Total	**100,0**	**100,0**	**100,0**
Number of Women	835	74	909

Table 11.06 provides the percentage distribution of women who induced or attempted an abortion by health problems and by whether hospitalization was required, according to current age, current marital status, residence, region and educational level. One quarter of women who induced or attempted an abortion had health problems. Three-fifths of women who had any health problems during an induced or attempted abortion were hospitalized. Hospitalization varies by age, residence and educational level, being highest for women in their forties, for those living in Ulaanbaatar, and those with post-secondary education.

Table 11.06 Percentage Distribution of Women Who Induced or Attempted an Abortion by Health Problems and by Whether They Sought Care, According to Current Age, Current Marital Status, Residence, Region and Education, Mongolia, 1998

Background Charactertistics	Any Health Problems				Hospitalization Required			
	Yes	No	Total	Number	Yes	No	Total	Number
Current Age								
15-24	33,3	66,7	100,0	69	*	*	100,0	23
25-29	29,6	70,4	100,0	162	56,3	43,8	100,0	48
30-34	19,7	80,3	100,0	208	46,3	53,7	100,0	41
35-39	22,4	77,6	100,0	237	58,5	41,5	100,0	53
40-49	26,6	73,4	100,0	233	80,6	19,4	100,0	62
Current Marital Status								
Currently Married	24,5	75,5	100,0	784	60,4	39,6	100,0	192
Formerly Married	24,2	75,8	100,0	95	*	*	100,0	23
Never Married	40,0	60,0	100,0	30	*	*	100,0	12
Residence								
Urban	24,6	75,4	100,0	716	59,7	40,3	100,0	176
Rural	26,4	73,6	100,0	193	64,7	35,3	100,0	51
Region								
Central	26,4	73,6	100,0	242	51,6	48,4	100,0	64
East	14,6	85,4	100,0	82	*	*	100,0	12
West	27,7	72,3	100,0	83	*	*	100,0	23
South	47,5	52,5	100,0	40	*	*	100,0	19
Ulaanbaatar	23,6	76,4	100,0	462	67,0	33,0	100,0	109
Highest Education Level								
Incomplete Secondary or Less	24,1	75,9	100,0	112	59,3	40,7	100,0	27
Complete Secondary	24,3	75,7	100,0	235	50,9	49,1	100,0	57
More than Secondary	25,4	74,6	100,0	562	65,0	35,0	100,0	143
Total	**25,0**	**75,0**	**100,0**	**909**	**60,8**	**39,2**	**100,0**	**227**

* Percentage based on fewer than 25 observations

Summary

Abortion plays a role in depressing fertility. Abortion is legal in Mongolia, although it is discouraged as a method of controlling fertility. Among women of childbearing age, almost one-fifth (19 percent) have at some time had an unwanted pregnancy, and 64 percent of the most recent unwanted pregnancies were aborted. It is estimated that currently one-sixth of pregnancies are aborted. Most abortions (95 percent) are performed by doctors.

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APPENDIX A

QUALITY OF THE DATA—NONSAMPLING ERROR

Albert M. Marckwardt

This appendix provides data users with an overview of the quality of the data of the Reproductive Health Survey (RHS). Nonsampling errors arise in surveys, and in censuses, from a variety of causes including the following:

a) failure to locate and interview the selected household;
b) mistakes in the way questions are asked;
c) misunderstanding on the part of either the interviewer or respondent;
d) lack of truthfulness on the part of the respondent;
e) deliberate falsification of data on the part of the interviewer;
f) coding errors;
g) data entry errors, programming errors, etc.

While it is impossible to avoid nonsampling errors entirely, great efforts were expended in the RHS to keep them under control. These efforts included:

a) careful questionnaire design;
b) pretest of survey instruments to guarantee their functionality;
c) a three-week interviewers' and supervisors' training course;
d) careful fieldwork supervision including field visits by headquarters' personnel;
e) thorough editing of questionnaires in the field, with the possibility of a return visit to the respondent, if needed;
f) the use of interactive data entry software to keep keying errors to a minimum;
g) computerized range and consistency check procedures.

Nevertheless, there is still a need to investigate content errors such as misreporting of ages, ignorance of dates of birth, the plausibility of age at death distributions, and other recall problems.

Table A.01 shows the distribution of the household population by single years of age. In many countries where ages are not well known, there is usually a substantial amount of heaping on ages ending in 0 and 5. This is not the case in Mongolia, where people obviously know their ages. The only exception to this rule is the heaping of women at age 50, but the cause in this case is not ignorance.

An examination of Table A.02 reveals errors in the age reporting of females around the borders of eligibility for the individual questionnaire, i.e. ages 15 and 49. When cross-checked against the previous table, there is an evident deficit of women at ages 15-17. This may be due to their being recorded as 12-14 years of age, or simply their complete omission from the listing of household members. This is a way for interviewers to lighten their interviewing loads. At the other extreme, there is clearly a deficit of women 45-49 years of age, and a surplus of women 50-54. On the other hand, there is little difference between the age distribution of women recorded in the household schedule and those interviewed with the individual questionnaire, since response rates were universally high across all age groups. It should be noted that

small deficits in the numbers of women at ages 15-19 and 45-49 have an almost trivial impact on demographic estimates.

Table A.03 shows the distribution of births from the birth history by calendar year, classified by whether living or dead, and several other measures. Dating of births was excellent: the month and year of birth were supplied for 100 percent of births. The sex ratio at birth fluctuates randomly from year to year, as can be expected with survey data; the overall ratio of 104 is normal. The sex ratio of dead children (141 overall) is also normal, reflecting higher mortality among males.

The purpose of calculating calendar year ratios in Table A.03 is to see if there was any shifting of birth years in order to avoid the long Section 3 of the questionnaire, which was asked for all births since 1990. If this had happened, there would be a concentration of births in 1989, and the calendar ratio for 1990 would be well under 100. The fact that the ratio for 1990 is 104 indicates that interviewers did not alter the year of birth.

Omission of births and deaths from the birth history can directly affect mortality estimates, and misreporting of the age at death will distort the age pattern of mortality. Table A.04 looks at the reporting of age at death in days for infants who died within one month of birth (neonatal deaths). The ratios of deaths in the first six days to all neonatal deaths appear reasonable, ranging from 62-64 percent for earlier time periods to 77 percent for the most recent period. This increase in the percent of early neonatal deaths is consistent with the overall decline in infant mortality.

Table A.05 examines the reporting of age at death in months for babies who died before the age of 2 years, and also presents the percentage of first-year deaths that were neonatal. The increase over time of the percentage of deaths that are neonatal is consistent with a decline in infant mortality. However, the very low percentages at 10-14 and 15-19 years preceding the survey suggest some omission of neonatal deaths that occurred long ago. This omission would have the effect of somewhat understating the decline in infant mortality reported in Chapter 7.

Overall, the quality of data collected by the RHS is excellent.

Table A.01 Single-Year Age Distribution of the De Facto Household Population by Sex, Mongolia 1998

	Males		Females			Males		Females	
Age	Number	Percentage	Number	Percentage	**Age**	Number	Percentage	Number	Percentage
0	427	3,2	385	2,7	36	184	1,4	238	1,7
1	337	2,5	351	2,4	37	168	1,3	194	1,4
2	359	2,7	325	2,3	38	192	1,4	247	1,7
3	397	3,0	364	2,5	39	152	1,1	210	1,5
4	363	2,7	360	2,5	40	174	1,3	185	1,3
5	350	2,6	337	2,4	41	150	1,1	159	1,1
6	383	2,9	370	2,6	42	168	1,3	163	1,1
7	386	2,9	461	3,2	43	112	0,8	148	1,0
8	430	3,2	415	2,9	44	111	0,8	124	0,9
9	392	2,9	407	2,8	45	97	0,7	95	0,7
10	375	2,8	378	2,6	46	101	0,8	115	0,8
11	360	2,7	388	2,7	47	72	0,5	67	0,5
12	386	2,9	374	2,6	48	104	0,8	67	0,5
13	377	2,8	366	2,6	49	77	0,6	74	0,5
14	352	2,6	369	2,6	50	94	0,7	136	0,9
15	343	2,6	287	2,0	51	67	0,5	68	0,5
16	327	2,4	292	2,0	52	53	0,4	50	0,3
17	297	2,2	242	1,7	53	61	0,5	62	0,4
18	241	1,8	256	1,8	54	59	0,4	46	0,3
19	210	1,6	238	1,7	55	46	0,3	47	0,3
20	210	1,6	266	1,9	56	67	0,5	67	0,5
21	218	1,6	257	1,8	57	41	0,3	37	0,3
22	238	1,8	292	2,0	58	54	0,4	57	0,4
23	254	1,9	269	1,9	59	37	0,3	34	0,2
24	217	1,6	274	1,9	60	38	0,3	45	0,3
25	225	1,7	299	2,1	61	40	0,3	51	0,4
26	220	1,6	282	2,0	62	28	0,2	35	0,2
27	211	1,6	263	1,8	63	32	0,2	33	0,2
28	239	1,8	277	1,9	64	22	0,2	32	0,2
29	188	1,4	250	1,7	65	31	0,2	39	0,3
30	214	1,6	251	1,8	66	28	0,2	28	0,2
31	202	1,5	209	1,5	67	24	0,2	16	0,1
32	200	1,5	243	1,7	68	25	0,2	31	0,2
33	219	1,6	236	1,6	69	7	0,1	9	0,1
34	196	1,5	247	1,7	70 +	135	1,0	214	1,5
35	173	1,3	237	1,7					
					Total	13 367	100,0	14 340	100,0

Table A.02 Percentage Distribution in Five-Year Age Groups of the De Facto Household Population of Women Aged 10-54 and of Interviewed Women Aged 15-49, and Percentage of Eligible Women Who Were Interviewed, Mongolia 1998

Age in Five-Year Groups	Women Aged 10-54 in Household Population		Interviewed Women Aged 15-49'		Percentage Interviewed
	Number	Percent	Number	Percent	
10-14	1 875	-	-	-	-
15-19	1 315	17,4	1 279	17,1	97,3
20-24	1 358	18,0	1 337	17,9	98,5
25-29	1 371	18,2	1 359	18,2	99,1
30-34	1 186	15,7	1 181	15,8	99,6
35-39	1 126	14,9	1 119	15,0	99,4
40-44	779	10,3	773	10,4	99,2
45-49	418	5,5	413	5,5	98,8
50-54	362	-	-	-	-
15-19	7 553	-	7 461	-	98,8

' This is distribution of age declared in the household questionnaire, and differs slightly from the age declared in the individual questionnaire (compare with table 2.09)

Table A.03 Distribution of Births by Calendar Year of Birth for Living (L), Dead (D), and All (T) Children, According to Reporting Completeness of Date of Birth, Sex Ratio at Birth, and Ratio of Births by Calendar Year, Mongolia 1998

	Number of Births			Sex Ratio[1]			Complete[2]			Calendar[3]			Male			Female		
Year	(L)	(D)	(T)	(L)	(D)	(T)	(L)	(D)	(T)	Ratio (L)	Ratio (D)	Ratio (T)	(L)	(D)	(T)	(L)	(D)	(T)
98	724	30	754	111,1	150,0	112,4	100,0	100,0	100,0	-	-	-	381	18	399	343	12	355
97	687	43	730	94,6	138,9	96,8	100,0	100,0	100,0	97,8	107,5	98,3	334	25	359	353	18	371
96	681	50	731	112,1	177,8	115,6	100,0	100,0	100,0	96,5	106,4	97,1	360	32	392	321	18	339
95	725	51	776	108,3	112,5	108,6	100,0	100,0	100,0	103,3	82,9	101,6	377	27	404	348	24	372
94	723	73	796	107,2	143,3	110,0	100,0	100,0	100,0	103,1	132,7	105,2	374	43	417	349	30	379
93	678	59	737	100,0	247,1	107,0	100,0	100,0	100,0	92,2	71,1	90,1	339	42	381	339	17	356
92	747	93	840	95,5	158,3	101,0	100,0	100,0	100,0	101,5	138,8	104,6	365	57	422	382	36	418
91	794	75	869	87,7	226,1	94,8	100,0	100,0	100,0	99,4	75,8	96,8	371	52	423	423	23	446
90	851	105	956	102,1	128,3	104,7	100,0	100,0	100,0	102,2	125,0	104,3	430	59	489	421	46	467
89	871	93	964	100,2	111,4	101,3	100,0	100,0	100,0	-	-	-	436	49	485	435	44	479
94-98	3 540	247	3 787	106,5	142,2	108,5	100,0	100,0	100,0	-	-	-	1 826	145	1 971	1 714	102	1 816
89-93	3 941	425	4 366	97,0	156,0	101,6	100,0	100,0	100,0	-	-	-	1 941	259	2 200	2 000	166	2 166
84-88	3 632	501	4 133	97,8	135,2	101,7	100,0	100,0	100,0	-	-	-	1 796	288	2 084	1 836	213	2 049
79-83	2 628	449	3 077	103,1	123,4	105,8	100,0	100,0	100,0	-	-	-	1 334	248	1 582	1 294	201	1 495
<79	1 955	316	2 271	96,7	161,2	103,7	100,0	100,0	100,0	-	-	-	961	195	1 156	994	121	1 115
All	15 696	1 938	17 634	100,3	141,3	104,1	100,0	100,0	100,0	-	-	-	7 858	1 135	8 993	7 838	803	8 641

- Not applicable

1 (Bm/Bf)*100, where Bm and Bf are the numbers of male and female births, respectively

2 Both year and month of birth given

3 [2Bx/(Bx-1+Bx+1)*100, where Bx is the number of births in a calender year x

Table A.04 Distribution of Reported Deaths Under 1 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, Mongolia 1998

	Years Preceding the Survey				
	0-4	5-9	10-14	15-19	0-19
0	49	36	29	25	139
1	25	31	19	6	81
2	9	11	5	4	29
3	10	9	9	5	33
4	1	1	0	1	3
5	3	3	2	2	10
6	1	2	0	1	4
7	9	15	9	14	47
8	0	0	1	0	1
9	1	1	3	1	6
10	3	2	8	2	15
11	1	0	0	0	1
12	0	1	2	0	3
13	1	0	1	0	2
14	3	6	6	2	17
15	1	5	1	1	8
16	0	0	0	1	1
17	2	0	0	0	2
18	1	2	0	0	3
19	0	0	1	0	1
20	2	2	0	2	6
21	2	5	3	1	11
22	1	2	0	0	3
24	0	0	1	0	1
26	0	1	0	0	1
28	1	0	1	0	2
29	1	0	0	0	1
30	0	1	2	1	4
% Early Neonatal	77,2	68,4	62,1	63,8	68,7
Total 0-30	127	136	103	69	435

Table A.05 Distribution of Reported Deaths Under 2 Years of Age by Age at Death in Months and the Percentage of Infant Deaths Reported to Occur at Age Under One Month, for Five-Year Periods of Birth Preceding the Survey, Mongolia 1998

	Years Preceding the Survey				
	0-4	5-9	10-14	15-19	0-19
<1 Month - Inc days	127	136	103	69	435
1	21	34	31	23	109
2	18	11	32	26	87
3	6	24	32	27	89
4	8	10	19	18	55
5	9	24	21	14	68
6	12	25	32	28	97
7	6	11	12	12	41
8	7	18	20	14	59
9	4	16	10	15	45
10	2	7	14	7	30
11	8	3	9	7	27
12	7	41	45	45	138
13	1	1	5	4	11
14	0	4	5	3	12
15	0	3	5	3	11
16	0	2	1	0	3
17	0	1	3	8	12
18	1	1	6	3	11
19	0	3	3	2	8
20	2	3	6	1	12
21	0	0	3	1	4
22	0	0	1	0	1
23	0	0	0	2	2
Percent Neonatal	55,7	42,6	30,7	26,5	38,1
Total 0-11	228	319	335	260	1 142

APPENDIX B

SAMPLING VARIABILITY

Albert M. Marckwardt

The results of sample surveys are affected by two types of errors, nonsampling error and sampling error. Nonsampling error is due to mistakes made in carrying out field activities, such as failure to locate and interview the correct household, errors in the way the questions are asked, misunderstanding on the part of either the interviewer or the respondent, etc. Nonsampling error also arises from office activities and includes editing and coding errors, keying errors, bad specification of cleaning or tabulation routines, etc. Although great efforts were made during the design and implementation of the 1998 RHS to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be measured statistically. The sample of households selected for the 1998 RHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each one would have yielded results that differed 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 *standard error* of a particular statistic (mean, percentage, etc.), which is the square root of the variance of the statistic. The standard error can be used to calculate confidence intervals within which, apart from nonsampling errors, 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 with the same design (and expected size) will fall within a range of plus or minus two times the standard error of that statistic.

If the sample of households had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 1998 RHS sample design depended on stages and clusters. Consequently, it is necessary to utilize more complex formulas. Two computer packages have been utilized. The first, CLUSTERS, developed for the World Fertility Survey program by the International Statistical Institute, has been used to calculate the sampling variances of means and proportions (or percentages). CLUSTERS uses the Taylor linearization method. The second package is ISSA, which, as noted elsewhere, has been used in all stages of processing the RHS. ISSA contains a Sampling Errors Module which permits the estimation of variances of rates, using the Jackknife repeated replication method. This Module has been used specifically to calculate the variances of the total fertility rate and the various infant and child mortality rates.

The Taylor linearization method treats any percentage or mean 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:

$$\text{var}(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

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 clusters selected in stratum 'h'
y_{hi}	is the sum of the values of variable y in cluster 'i' in stratum 'h'
x_{hi}	is the sum of the number of cases in cluster 'i' in stratum 'h'
f	is the overall sampling fraction, which is so small that CLUSTERS ignores it

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors using simple formulas. Each replication considers all but one clusters in the calculation of estimates. Pseudo-independent replications are thus created. In the RHS there were 240 clusters; hence, 240 replications were created. The variance of a rate *r* is calculated as follows:

$$SE^2(R) = \text{var}(r) = \frac{1}{k(k-1)}\sum_{i=1}^{k}(r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where	r	is the estimate computed from the full sample of 240 clusters,
	$r_{(i)}$	is the estimate computed from 239 clusters (i^{th} cluster excluded),
and	k	is the total number of clusters.

In addition to the standard errors, the programs compute the design effect (DEFT) for each estimate (except for rates), 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, whereas 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. The programs also compute the relative error and confidence limits for the estimates.

Sampling errors are presented in Tables B.02 – B.16 for variables considered to be of major interest. Results are presented for the whole country, for urban and rural areas separately, for each of four education groups, for each of five regions, and for each of three age groups. For each variable, the type of statistic (percentage, mean or rate) and the base population are given in Table B.01. For each variable, Tables B.02 – B.16 present the value of the statistic (R), its standard error (SE), the number of cases (N) where relevant, the design effect (DEFT) where applicable, the relative standard error (SE/R), and the 95 percent confidence limits (R-2SE, R+2SE).

The confidence limits have the following interpretation. For the percentage of currently married women using the contraceptive intrauterine device (IUD), the overall value for the full sample is 32.2%, and its standard error is 0.8%. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, which means that there is a high probability (95 percent) the true percentage currently using the IUD is between 30.6% and 33.8%.

The relative standard errors for most estimates for the country as a whole are small, except for estimates of very small percentages. The magnitude of the error increases as estimates for sub-populations such as geographical areas are considered. For the variable IUD, for instance, the relative standard error (as a percentage of the estimated parameter) for the whole country and for urban and rural areas is 2.5 percent, 3.5 percent, and 3.4 percent, respectively. For the five regions, the relative standard error of the variable IUD varies between 4.2 percent and 9.0 percent.

Special mention should be made of the sampling errors for rates. The denominators are exposure-years, and the numerators are either births or deaths in the population under consideration during the indicated period of time. Estimates of sampling errors are shown for the TFR in the three years prior to the survey, presented in Chapter 3, and for the various 10-year mortality rates presented in Chapter 7. These estimates are calculated at the national level, and by urban-rural residence, region, and mother's educational level. (They are irrelevant for age groups.) In keeping with the necessary caution concerning the infant mortality rate for the 5-year period prior to the survey, this statistic and the related calculations are presented at only the national level.

It should be noted that the survey indicates, with a 95 percent level of confidence, that the TFR for the 3-year period prior to the survey lay between 2,9 and 3,2 children per woman, and that the infant mortality rate for the 5-year period prior to the survey lay between 56 and 74 per thousand births. The differences between the survey results and registration statistics are not due to sampling variability.

Table B.01 List of Selected Variables for Sampling Error, Mongolia, 1998

Variable Name	Description	Base Population
RADIO	% listening to radio weekly	All women
CEB	Mean number of children ever born	All women
CEB40	Mean number of children ever born	Women 40-49 years old
MAR20	% married before age 20	Women 25-49 years old
CMAR	% currently married	All women
CUSE	% currently using any contraceptive	Currently married women
IUD	% currently using an IUD	Currently married women
PERAB	% currently using periodic abstinence	Currently married women
PILL	% currently using the pill	Currently married women
NOMORE	% who want no more children	Currently married women
IDEAL	Mean ideal number of children	Women with numeric response
DIE	% who say AIDS almost always fatal	Women who heard of AIDS
NORISK	% who say at no risk of AIDS	Women who heard of AIDS
UNWANT	% who have had unwanted pregnancy	All women
ABORT	% who have aborted	Women with unwanted pregnancy
ANTNAT	% with antenatal care from gynecologist	Births, last 5 years
DELIV	% delivered by gynecologist	Births, last 5 years
NOCOMP	% with no pregnancy complications	Births, last 5 years
IRON	% of mothers receiving iron pills	Last births, last 5 years
RESP	% respiratory infection last 2 weeks	Children under 5 years
TFR-3	Total fertility rate, last 3 years	Women years of exposure
NN-10	Neonatal mortality rate, 10 years	Children years of exposure
PNN-10	Postneonatal mortality rate, 10 years	Children years of exposure
IMR-10	Infant mortality rate, 10 years	Children years of exposure
4Q1-10	Child mortality rate, 10 years	Children years of exposure
5Q0-10	Under-five mortality rate, 10 years	Children years of exposure
IMR-5	Infant mortality rate, 5 years	Children years of exposure

Table B.02 Sampling Errors - National Sample, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	78,582	0,826	7461	1,738	0,011	76,931	80,233
CEB	2,363	0,027	7461	1,028	0,011	2,310	2,417
CEB40	5,120	0,069	1188	1,018	0,014	4,981	5,258
MAR20	37,792	0,793	4845	1,138	0,021	36,206	39,377
CMAR	65,661	0,568	7461	1,033	0,009	64,526	66,797
CUSE	59,890	0,826	4899	1,180	0,014	58,237	61,542
IUD	32,211	0,795	4899	1,191	0,025	30,621	33,800
PERAB	12,452	0,639	4899	1,354	0,051	11,174	13,729
PILL	4,205	0,307	4899	1,069	0,073	3,592	4,818
NOMORE	64,503	0,722	4899	1,056	0,011	63,058	65,948
IDEAL	3,271	0,015	7459	1,113	0,005	3,240	3,302
DIE	58,417	0,712	7164	1,223	0,012	56,992	59,842
NORISK	74,749	0,545	7164	1,062	0,007	73,658	75,839
UNWANT	18,684	0,550	7461	1,219	0,029	17,584	19,784
ABORT	63,702	1,732	1394	1,345	0,027	60,237	67,166
ANTNAT	48,405	1,524	3857	1,893	0,031	45,358	51,453
DELIV	40,524	1,319	3857	1,668	0,033	37,886	43,161
NOCOMP	65,777	0,898	3857	1,175	0,014	63,981	67,572
IRON	42,426	1,213	2918	1,326	0,029	40,000	44,852
RESP	11,173	0,573	3607	1,093	0,051	10,026	12,319
TFR-3	3,058	0,084	NA	NA	0,027	2,890	3,226
NN-10	32,086	2,145	NA	NA	0,067	27,796	36,376
PNN-10	37,196	2,484	NA	NA	0,067	32,228	42,164
IMR-10	69,282	3,476	NA	NA	0,050	62,330	76,234
4Q1-10	24,590	2,059	NA	NA	0,084	20,472	28,708
5Q0-10	92,169	4,180	NA	NA	0,045	83,809	100,529
IMR-5	65,003	4,329	NA	NA	0,067	56,345	73,661

NA: Not applicable

Table B.03 Sampling Errors - Urban Areas, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	83,914	1,082	3904	1,841	0,013	81,749	86,079
CEB	2,027	0,032	3904	0,986	0,016	1,963	2,090
CEB40	4,418	0,077	689	0,979	0,017	4,265	4,571
MAR20	36,227	1,050	2534	1,100	0,029	34,127	38,327
CMAR	61,066	0,741	3904	0,949	0,012	59,584	62,547
CUSE	61,955	1,220	2384	1,226	0,020	59,515	64,394
IUD	28,314	0,991	2384	1,074	0,035	26,331	30,297
PERAB	15,394	1,005	2384	1,359	0,065	13,385	17,403
PILL	5,285	0,516	2384	1,126	0,098	4,253	6,318
NOMORE	63,339	1,100	2384	1,114	0,017	61,139	65,539
IDEAL	3,177	0,018	3903	1,015	0,006	3,141	3,213
DIE	63,594	0,833	3873	1,077	0,013	61,928	65,260
NORISK	73,561	0,819	3873	1,156	0,011	71,923	75,198
UNWANT	22,490	0,779	3904	1,166	0,035	20,931	24,048
ABORT	80,296	1,707	878	1,271	0,021	76,883	83,709
ANTNAT	71,697	1,670	1491	1,431	0,023	68,357	75,037
DELIV	59,088	1,806	1491	1,418	0,031	55,475	62,701
NOCOMP	67,606	1,338	1491	1,104	0,020	64,929	70,283
IRON	45,816	1,807	1231	1,272	0,039	42,203	49,430
RESP	12,358	0,895	1408	1,020	0,072	10,569	14,147
TFR-3	2,456	0,101	NA	NA	0,041	2,254	2,658
NN-10	26,555	2,890	NA	NA	0,109	20,775	32,335
PNN-10	27,968	3,289	NA	NA	0,118	21,390	34,546
IMR-10	54,523	4,415	NA	NA	0,081	45,693	63,353
4Q1-10	21,468	2,397	NA	NA	0,112	16,674	26,262
5Q0-10	74,821	4,939	NA	NA	0,066	64,943	84,699

NA: Not applicable

Table B.04 Sampling Errors - Rural Areas, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	72,73	1,293	3557	1,732	0,018	70,143	75,317
CEB	2,733	0,045	3557	1,106	0,017	2,642	2,824
CEB40	6,088	0,100	499	0,940	0,016	5,888	6,288
MAR20	39,507	1,388	2311	1,364	0,035	36,731	42,282
CMAR	70,706	0,859	3557	1,125	0,012	68,988	72,423
CUSE	57,932	1,136	2515	1,154	0,020	55,66	60,205
IUD	35,905	1,227	2515	1,282	0,034	33,451	38,358
PERAB	9,662	0,758	2515	1,286	0,078	8,147	11,177
PILL	3,181	0,358	2515	1,024	0,113	2,464	3,898
NOMORE	65,606	0,968	2515	1,022	0,015	63,67	67,542
IDEAL	3,374	0,025	3556	1,181	0,008	3,324	3,425
DIE	52,325	1,163	3291	1,336	0,022	49,998	54,651
NORISK	76,147	0,685	3291	0,922	0,009	74,776	77,518
UNWANT	14,507	0,741	3557	1,255	0,051	13,025	15,988
ABORT	35,465	3,257	516	1,545	0,092	28,951	41,98
ANTNAT	33,728	1,760	2366	1,810	0,052	30,208	37,247
DELIV	28,825	1,427	2366	1,532	0,049	25,972	31,679
NOCOMP	64,624	1,192	2366	1,212	0,018	62,241	67,007
IRON	39,953	1,722	1687	1,444	0,043	36,508	43,397
RESP	10,414	0,758	2199	1,164	0,073	8,898	11,93
TFR-3	3,656	0,109	NA	NA	0,030	3,438	3,874
NN-10	35,863	2,971	NA	NA	0,083	29,921	41,805
PNN-10	43,573	3,422	NA	NA	0,079	36,729	50,417
IMR-10	79,436	4,798	NA	NA	0,060	69,840	89,032
4Q1-10	27,029	3,119	NA	NA	0,115	20,791	33,267
5Q0-10	104,318	5,964	NA	NA	0,057	92,390	116,246

NA: Not applicable

Table B.05 Sampling Errors - Primary or Less, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	70,849	1,942	813	1,217	0,027	66,965	74,732
CEB	3,022	0,117	813	1,021	0,039	2,788	3,256
CEB40	6,417	0,164	228	0,964	0,026	6,088	6,745
MAR20	56,381	2,593	431	1,084	0,046	51,195	61,566
CMAR	49,569	1,878	813	1,070	0,038	45,814	53,325
CUSE	45,658	2,240	403	0,902	0,049	41,178	50,138
IUD	32,754	2,026	403	0,866	0,062	28,702	36,807
PERAB	2,730	0,800	403	0,985	0,293	1,129	4,330
PILL	1,737	0,623	403	0,955	0,358	0,492	2,982
NOMORE	81,141	1,778	403	0,911	0,022	77,585	84,698
IDEAL	3,253	0,057	813	1,045	0,018	3,139	3,368
DIE	46,353	1,795	658	0,923	0,039	42,762	49,943
NORISK	77,204	1,586	658	0,969	0,021	74,031	80,376
UNWANT	10,947	1,012	813	0,923	0,092	8,924	12,970
ABORT	16,854	3,915	89	0,981	0,232	9,025	24,683
ANTNAT	37,234	3,694	282	1,281	0,099	29,847	44,621
DELIV	27,660	2,525	282	0,946	0,091	22,610	32,709
NOCOMP	60,638	3,421	282	1,174	0,056	53,797	67,479
IRON	28,502	3,482	207	1,107	0,122	21,539	35,466
RESP	6,950	1,663	259	1,050	0,239	3,624	10,276
TFR-3	3,368	0,281	NA	NA	0,083	2,806	3,930
NN-10	44,150	8,359	NA	NA	0,189	27,432	60,868
PNN-10	55,543	8,540	NA	NA	0,154	38,463	72,623
IMR-10	99,693	12,514	NA	NA	0,126	74,665	124,721
4Q1-10	46,779	9,100	NA	NA	0,195	28,579	64,979
5Q0-10	141,808	13,575	NA	NA	0,096	114,658	168,958

NA: Not applicable

Table B.06 Sampling Errors - Incomplete Secondary, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	75,749	1,215	1835	1,214	0,016	73,320	78,179
CEB	2,283	0,056	1835	0,970	0,024	2,172	2,394
CEB40	5,818	0,120	231	0,831	0,021	5,578	6,058
MAR20	50,224	1,698	894	1,015	0,034	46,828	53,619
CMAR	57,330	1,292	1835	1,119	0,023	54,745	59,914
CUSE	51,236	1,685	1052	1,093	0,033	47,866	54,605
IUD	32,034	1,543	1052	1,072	0,048	28,947	35,121
PERAB	6,559	0,904	1052	1,184	0,138	4,750	8,368
PILL	3,612	0,553	1052	0,962	0,153	2,505	4,719
NOMORE	67,490	1,425	1052	0,986	0,021	64,641	70,340
IDEAL	3,148	0,029	1834	1,015	0,009	3,090	3,207
DIE	52,674	1,276	1739	1,065	0,024	50,123	55,225
NORISK	73,548	1,166	1739	1,102	0,016	71,216	75,880
UNWANT	13,297	0,876	1835	1,105	0,066	11,544	15,050
ABORT	37,295	3,133	244	1,010	0,084	31,029	43,562
ANTNAT	36,106	2,248	1022	1,496	0,062	31,609	40,602
DELIV	32,877	2,105	1022	1,432	0,064	28,667	37,087
NOCOMP	68,102	1,489	1022	1,021	0,022	65,124	71,080
IRON	37,209	2,037	731	1,139	0,055	33,134	41,284
RESP	10,319	1,092	940	1,100	0,106	8,135	12,504
TFR-3	3,745	0,152	NA	NA	0,041	3,441	4,049
NN-10	37,258	4,390	NA	NA	0,118	28,478	46,038
PNN-10	45,270	5,521	NA	NA	0,122	34,228	56,312
IMR-10	82,528	7,143	NA	NA	0,087	68,242	96,814
4Q1-10	33,650	4,389	NA	NA	0,130	24,872	42,428
5Q0-10	113,401	8,688	NA	NA	0,077	96,025	130,777

NA: Not applicable

Table B.07 Sampling Errors - Complete Secondary, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	78,826	1,104	2215	1,271	0,014	76,618	81,034
CEB	1,791	0,037	2215	0,919	0,021	1,717	1,865
CEB40	5,096	0,206	156	1,065	0,040	4,684	5,508
MAR20	36,409	1,445	1214	1,046	0,040	33,519	39,298
CMAR	60,271	1,139	2215	1,095	0,019	57,994	62,548
CUSE	60,225	1,387	1335	1,035	0,023	57,452	62,998
IUD	31,760	1,338	1335	1,050	0,042	29,084	34,437
PERAB	11,461	0,900	1335	1,032	0,079	9,660	13,261
PILL	4,719	0,544	1335	0,936	0,115	3,632	5,806
NOMORE	54,831	1,288	1335	0,945	0,023	52,255	57,407
IDEAL	3,203	0,025	2214	1,005	0,008	3,152	3,254
DIE	59,571	1,037	2189	0,989	0,017	57,496	61,645
NORISK	74,829	0,982	2189	1,058	0,013	72,865	76,793
UNWANT	16,163	0,777	2215	0,994	0,048	14,608	17,717
ABORT	63,687	2,640	358	1,037	0,041	58,406	68,968
ANTNAT	51,178	2,102	1231	1,475	0,041	46,973	55,383
DELIV	40,617	1,947	1231	1,390	0,048	36,723	44,511
NOCOMP	65,556	1,426	1231	1,052	0,022	62,704	68,408
IRON	42,934	1,908	927	1,173	0,044	39,118	46,750
RESP	12,858	0,942	1151	0,954	0,073	10,975	14,742
TFR-3	2,933	0,120	NA	NA	0,041	2,693	3,173
NN-10	28,766	3,999	NA	NA	0,139	20,768	36,764
PNN-10	39,803	4,312	NA	NA	0,108	31,179	48,427
IMR-10	68,569	5,611	NA	NA	0,082	57,347	79,791
4Q1-10	17,322	3,124	NA	NA	0,180	11,074	23,570
5Q0-10	84,703	6,295	NA	NA	0,074	72,113	97,293

NA: Not applicable

Table B.08 Sampling Errors - More than Secondary, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	82,794	0,981	2598	1,325	0,012	80,832	84,757
CEB	2,702	0,040	2598	1,112	0,015	2,622	2,783
CEB40	4,328	0,076	573	0,942	0,018	4,175	4,481
MAR20	30,225	0,942	2306	0,985	0,031	28,342	32,109
CMAR	81,178	0,813	2598	1,061	0,010	79,551	82,805
CUSE	66,714	1,152	2109	1,123	0,017	64,409	69,019
IUD	32,480	1,100	2109	1,079	0,034	30,280	34,680
PERAB	17,876	1,093	2109	1,310	0,061	15,690	20,062
PILL	4,647	0,469	2109	1,023	0,101	3,709	5,585
NOMORE	65,955	1,111	2109	1,076	0,017	63,733	68,177
IDEAL	3,421	0,022	2598	1,132	0,007	3,377	3,466
DIE	64,391	0,924	2578	0,980	0,014	62,542	66,240
NORISK	74,864	0,960	2578	1,124	0,013	72,944	76,785
UNWANT	27,059	1,048	2598	1,202	0,039	24,963	29,156
ABORT	78,805	1,697	703	1,100	0,022	75,411	82,199
ANTNAT	57,716	1,925	1322	1,416	0,033	53,866	61,565
DELIV	49,092	1,888	1322	1,373	0,038	45,316	52,868
NOCOMP	65,280	1,353	1322	1,033	0,021	62,574	67,985
IRON	48,338	1,712	1053	1,111	0,035	44,914	51,762
RESP	11,138	0,988	1257	1,113	0,089	9,162	13,113
TFR-3	2,781	0,137	NA	NA	0,049	2,507	3,055
NN-10	28,727	3,019	NA	NA	0,105	22,689	34,765
PNN-10	26,524	2,996	NA	NA	0,113	20,532	32,516
IMR-10	55,251	4,181	NA	NA	0,076	46,889	63,613
4Q1-10	19,379	2,288	NA	NA	0,118	14,803	23,955
5Q0-10	73,560	4,847	NA	NA	0,066	63,866	83,254

NA: Not applicable

Table B.09 Sampling Errors - Central Region, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	72,244	1,533	2576	1,737	0,021	69,179	75,309
CEB	2,458	0,044	2576	0,979	0,018	2,370	2,546
CEB40	5,460	0,114	402	0,979	0,021	5,233	5,688
MAR20	41,616	1,187	1658	0,980	0,029	39,242	43,991
CMAR	66,654	1,115	2576	1,200	0,017	64,424	68,884
CUSE	60,571	1,445	1717	1,225	0,024	57,681	63,460
IUD	34,945	1,455	1717	1,264	0,042	32,035	37,854
PERAB	11,881	1,134	1717	1,452	0,095	9,613	14,149
PILL	3,960	0,394	1717	0,837	0,099	3,173	4,748
NOMORE	66,511	1,341	1717	1,177	0,020	63,829	69,193
IDEAL	3,311	0,027	2576	1,093	0,008	3,258	3,365
DIE	58,016	1,360	2439	1,361	0,023	55,295	60,736
NORISK	79,172	0,853	2439	1,037	0,011	77,466	80,877
UNWANT	15,644	0,800	2576	1,117	0,051	14,045	17,244
ABORT	58,561	2,789	403	1,135	0,048	52,983	64,138
ANTNAT	45,646	2,385	1378	1,777	0,052	40,876	50,416
DELIV	39,405	1,920	1378	1,458	0,049	35,566	43,244
NOCOMP	65,022	1,434	1378	1,116	0,022	62,154	67,889
IRON	43,132	1,830	1041	1,192	0,042	39,471	46,792
RESP	11,604	0,811	1284	0,907	0,070	9,982	13,226
TFR-3	3,224	0,129	NA	NA	0,040	2,966	3,482
NN-10	30,376	3,548	NA	NA	0,117	23,280	37,472
PNN-10	46,434	4,338	NA	NA	0,093	37,758	55,110
IMR-10	76,810	5,645	NA	NA	0,073	65,520	88,100
4Q1-10	26,694	3,311	NA	NA	0,124	20,072	33,316
5Q0-10	101,453	6,026	NA	NA	0,059	89,401	113,505

NA: Not applicable

Table B.10 Sampling Errors - East Region, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	69,764	2,930	678	1,660	0,042	63,905	75,623
CEB	2,835	0,106	678	1,138	0,037	2,623	3,046
CEB40	5,733	0,301	101	1,247	0,053	5,130	6,335
MAR20	48,454	2,006	485	0,883	0,041	44,442	52,466
CMAR	69,469	1,485	678	0,839	0,021	66,499	72,439
CUSE	63,907	2,952	471	1,333	0,046	58,002	69,811
IUD	32,909	2,171	471	1,002	0,066	28,566	37,252
PERAB	13,800	2,267	471	1,425	0,164	9,267	18,334
PILL	4,034	1,161	471	1,279	0,288	1,712	6,356
NOMORE	73,673	2,159	471	1,063	0,029	69,356	77,990
IDEAL	3,109	0,046	678	1,119	0,015	3,016	3,202
DIE	53,610	2,595	651	1,327	0,048	48,419	58,801
NORISK	70,353	2,308	651	1,289	0,033	65,737	74,970
UNWANT	22,861	1,706	678	1,057	0,075	19,449	26,274
ABORT	52,903	6,950	155	1,728	0,131	39,003	66,804
ANTNAT	39,227	6,379	362	2,482	0,163	26,469	51,984
DELIV	30,663	4,840	362	1,994	0,158	20,983	40,343
NOCOMP	74,033	3,049	362	1,321	0,041	67,935	80,132
IRON	48,659	5,902	261	1,904	0,121	36,855	60,463
RESP	14,804	2,445	331	1,251	0,165	9,914	19,693
TFR-3	2,980	0,232	NA	NA	0,078	2,516	3,444
NN-10	37,564	7,115	NA	NA	0,189	23,334	51,794
PNN-10	38,922	8,026	NA	NA	0,206	22,870	54,974
IMR-10	76,486	13,008	NA	NA	0,170	50,470	102,502
4Q1-10	24,743	6,540	NA	NA	0,264	11,663	37,823
5Q0-10	99,337	13,105	NA	NA	0,132	73,127	125,547

NA: Not applicable

Table B.11 Sampling Errors - West Region, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	76,992	1,747	1569	1,644	0,023	73,498	80,486
CEB	2,702	0,066	1569	1,050	0,024	2,571	2,834
CEB40	5,857	0,153	238	1,029	0,026	5,551	6,163
MAR20	27,037	1,670	1043	1,214	0,062	23,698	30,377
CMAR	68,515	1,406	1569	1,199	0,021	65,703	71,327
CUSE	53,116	1,554	1075	1,020	0,029	50,009	56,223
IUD	32,372	1,752	1075	1,227	0,054	28,867	35,877
PERAB	8,093	0,749	1075	0,900	0,093	6,596	9,590
PILL	2,605	0,430	1075	0,884	0,165	1,745	3,464
NOMORE	63,907	1,351	1075	0,922	0,021	61,206	66,608
IDEAL	3,459	0,044	1568	1,273	0,013	3,371	3,548
DIE	51,268	1,885	1459	1,440	0,037	47,499	55,037
NORISK	72,310	0,894	1459	0,763	0,012	70,521	74,099
UNWANT	14,786	0,995	1569	1,110	0,067	12,796	16,777
ABORT	30,172	4,177	232	1,383	0,138	21,818	38,527
ANTNAT	32,719	2,662	1085	1,868	0,081	27,394	38,044
DELIV	29,309	2,423	1085	1,753	0,083	24,462	34,155
NOCOMP	61,659	1,826	1085	1,237	0,030	58,007	65,311
IRON	34,404	2,460	747	1,414	0,072	29,484	39,325
RESP	7,396	0,846	1014	1,029	0,114	5,705	9,088
TFR-3	3,853	0,192	NA	NA	0,050	3,469	4,237
NN-10	37,315	4,720	NA	NA	0,126	27,875	46,755
PNN-10	39,442	5,228	NA	NA	0,133	28,986	49,898
IMR-10	76,757	7,212	NA	NA	0,094	62,333	91,181
4Q1-10	28,598	5,293	NA	NA	0,185	18,012	39,184
5Q0-10	103,160	10,566	NA	NA	0,102	82,028	124,292

NA: Not applicable

Table B.12 Sampling Errors - South Region, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	85,714	3,106	462	1,906	0,036	79,503	91,926
CEB	2,552	0,118	462	1,157	0,046	2,315	2,789
CEB40	5,459	0,406	61	1,241	0,074	4,648	6,271
MAR20	43,103	3,941	290	1,353	0,091	35,222	50,985
CMAR	72,511	1,826	462	0,878	0,025	68,859	76,162
CUSE	55,821	2,795	335	1,029	0,050	50,231	61,411
IUD	30,448	2,731	335	1,084	0,090	24,987	35,909
PERAB	9,254	1,880	335	1,186	0,203	5,493	13,014
PILL	4,776	1,420	335	1,217	0,297	1,936	7,616
NOMORE	64,478	2,870	335	1,096	0,045	58,737	70,218
IDEAL	3,216	0,047	462	0,921	0,015	3,122	3,311
DIE	56,532	1,838	444	0,780	0,033	52,856	60,207
NORISK	79,955	1,830	444	0,962	0,023	76,295	83,615
UNWANT	14,719	2,095	462	1,270	0,142	10,529	18,908
ABORT	58,824	12,951	68	2,154	0,220	32,922	84,725
ANTNAT	50,538	5,763	279	1,922	0,114	39,012	62,063
DELIV	40,143	5,343	279	1,817	0,133	29,457	50,829
NOCOMP	66,667	2,862	279	1,012	0,043	60,942	72,391
IRON	52,093	3,574	215	1,047	0,069	44,944	59,242
RESP	13,858	3,329	267	1,572	0,240	7,199	20,516
TFR-3	3,513	0,344	NA	NA	0,098	2,825	4,201
NN-10	20,084	5,507	NA	NA	0,274	9,070	31,098
PNN-10	25,111	7,630	NA	NA	0,304	9,851	40,371
IMR-10	45,194	11,059	NA	NA	0,245	23,076	67,312
4Q1-10	14,919	3,655	NA	NA	0,245	7,609	22,229
5Q0-10	59,439	11,794	NA	NA	0,198	35,851	83,027

NA: Not applicable

Table B.13 Sampling Errors - Ulaanbaatar, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	88,465	1,320	2176	1,928	0,015	85,824	91,106
CEB	1,821	0,041	2176	1,020	0,022	1,739	1,902
CEB40	4,096	0,109	386	1,093	0,027	3,877	4,315
MAR20	36,450	1,446	1369	1,111	0,040	33,558	39,342
CMAR	59,789	0,827	2176	0,787	0,014	58,134	61,443
CUSE	64,181	1,520	1301	1,143	0,024	61,142	67,221
IUD	28,670	1,344	1301	1,071	0,047	25,983	31,358
PERAB	17,141	1,481	1301	1,417	0,086	14,178	20,103
PILL	5,765	0,787	1301	1,217	0,136	4,192	7,338
NOMORE	59,032	1,443	1301	1,058	0,024	56,145	61,918
IDEAL	3,150	0,021	2175	0,983	0,007	3,107	3,193
DIE	65,500	1,031	2171	1,011	0,016	63,437	67,562
NORISK	71,672	1,049	2171	1,084	0,015	69,575	73,769
UNWANT	24,632	1,237	2176	1,339	0,050	22,158	27,107
ABORT	85,821	1,643	536	1,089	0,019	82,535	89,106
ANTNAT	79,681	1,989	753	1,355	0,025	75,704	83,658
DELIV	63,612	2,520	753	1,436	0,040	58,572	68,652
NOCOMP	68,792	2,143	753	1,268	0,031	64,506	73,077
IRON	44,801	2,342	654	1,203	0,052	40,117	49,485
RESP	13,080	1,246	711	0,985	0,095	10,587	15,573
TFR-3	2,172	0,100	NA	NA	0,046	1,972	2,372
NN-10	29,612	4,063	NA	NA	0,137	21,486	37,738
PNN-10	21,915	4,000	NA	NA	0,183	13,915	29,915
IMR-10	51,527	6,025	NA	NA	0,117	39,477	63,577
4Q1-10	19,790	3,333	NA	NA	0,168	13,124	26,456
5Q0-10	70,297	6,806	NA	NA	0,097	56,685	83,909

NA: Not applicable

Table B.14 Sampling Errors - Age 15-24, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	78,861	1,033	2616	1,293	0,013	76,795	80,926
CEB	0,466	0,017	2616	1,195	0,036	0,432	0,500
CEB40	NA	NA	NA	NA	NA	NA	NA
MAR20	NA	NA	NA	NA	NA	NA	NA
CMAR	32,569	1,150	2616	1,255	0,035	30,268	34,869
CUSE	45,657	1,686	852	0,987	0,037	42,286	49,029
IUD	23,944	1,521	852	1,040	0,064	20,901	26,987
PERAB	8,099	0,911	852	0,974	0,112	6,276	9,921
PILL	4,343	0,676	852	0,968	0,156	2,990	5,695
NOMORE	22,653	1,429	852	0,996	0,063	19,795	25,510
IDEAL	2,758	0,023	2615	1,122	0,009	2,711	2,804
DIE	52,963	1,046	2464	1,040	0,020	50,872	55,054
NORISK	73,093	0,816	2464	0,913	0,011	71,461	74,724
UNWANT	5,734	0,463	2616	1,017	0,081	4,809	6,659
ABORT	46,000	4,174	150	1,022	0,091	37,653	54,347
ANTNAT	46,023	2,261	1119	1,517	0,049	41,501	50,545
DELIV	40,840	2,138	1119	1,454	0,052	36,564	45,116
NOCOMP	62,109	1,672	1119	1,152	0,027	58,765	65,453
IRON	40,345	1,767	870	1,062	0,044	36,811	43,879
RESP	14,655	1,077	1044	0,984	0,074	12,501	16,810

NA: Not applicable

Table B.15 Sampling Errors - Age 25-34, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	75,760	1,132	2533	1,330	0,015	73,495	78,025
CEB	2,364	0,028	2533	1,025	0,012	2,308	2,419
CEB40	NA	NA	NA	NA	NA	NA	NA
MAR20	33,083	1,016	2533	1,087	0,031	31,051	35,115
CMAR	83,695	0,632	2533	0,861	0,008	82,431	84,960
CUSE	64,575	1,121	2120	1,079	0,017	62,334	66,817
IUD	36,462	1,139	2120	1,089	0,031	34,184	38,740
PERAB	12,123	0,749	2120	1,057	0,062	10,624	13,621
PILL	5,094	0,500	2120	1,046	0,098	4,095	6,094
NOMORE	55,755	1,096	2120	1,016	0,020	53,563	57,946
IDEAL	3,323	0,023	2533	1,088	0,007	3,278	3,368
DIE	59,829	1,109	2462	1,122	0,019	57,612	62,047
NORISK	73,517	0,908	2462	1,021	0,012	71,701	75,334
UNWANT	21,753	0,959	2533	1,170	0,044	19,835	23,671
ABORT	64,428	2,273	551	1,114	0,035	59,882	68,975
ANTNAT	49,026	1,695	2207	1,593	0,035	45,635	52,416
DELIV	40,054	1,574	2207	1,509	0,039	36,906	43,202
NOCOMP	67,422	1,216	2207	1,218	0,018	64,990	69,853
IRON	42,875	1,550	1593	1,250	0,036	39,775	45,975
RESP	10,131	0,678	2063	1,021	0,067	8,774	11,487

NA: Not applicable

Table B.16 Sampling Errors - Age 35-49, Mongolia, 1998

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	81,358	1,047	2312	1,292	0,013	79,264	83,452
CEB	4,510	0,054	2312	1,163	0,012	4,402	4,619
CEB40	5,120	0,069	1188	1,018	0,014	4,981	5,258
MAR20	42,950	1,098	2312	1,066	0,026	40,754	45,146
CMAR	83,348	0,863	2312	1,113	0,010	81,623	85,073
CUSE	61,028	1,162	1927	1,046	0,019	58,703	63,352
IUD	31,188	1,141	1927	1,081	0,037	28,906	33,471
PERAB	14,738	0,982	1927	1,216	0,067	12,774	16,702
PILL	3,166	0,432	1927	1,083	0,136	2,302	4,030
NOMORE	92,631	0,645	1927	1,084	0,007	91,341	93,921
IDEAL	3,795	0,026	2311	0,998	0,007	3,743	3,847
DIE	62,869	1,031	2238	1,009	0,016	60,807	64,930
NORISK	77,927	0,936	2238	1,067	0,012	76,055	79,798
UNWANT	29,974	1,035	2312	1,086	0,035	27,904	32,044
ABORT	66,955	1,980	693	1,107	0,030	62,996	70,915
ANTNAT	50,847	2,844	531	1,310	0,056	45,159	56,536
DELIV	41,808	2,709	531	1,264	0,065	36,390	47,226
NOCOMP	66,667	2,542	531	1,242	0,038	61,582	71,751
IRON	44,835	2,304	455	0,987	0,051	40,226	49,444
RESP	8,200	1,310	500	1,067	0,160	5,580	10,820

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APPENDIX D

APPROVED BY NATIONAL STATISTICAL OFFICE OF MONGOLIA N.o . . . RHS-1

MONGOLIAN REPRODUCTIVE HEALTH SURVEY 1998

HOUSEHOLD QUESTIONNAIRE

CLUSTER NUMBER ☐☐☐

AIMAG ☐☐

SOM ☐☐

BAG ☐☐

HOUSEHOLD NUMBER ☐☐☐

AREA* ☐

HEAD OF HOUSEHOLD

*** AREA CODES :**

1. ULAANBAATAR
2. AIMAG CENTER
3. SOM CENTER
4. REMOTE RURAL

INTERVIEW VISIT

FIRST	SECOND	FINAL
DAY ☐☐	DAY ☐☐	DAY ☐☐
MONTH ☐☐	MONTH ☐☐	MONTH ☐☐
RESULTS ** ☐	RESULTS ** ☐	RESULTS ** ☐

TOTAL NUMBER OF VISITS ☐

**** RESULTS CODES**

1. COMPLETED
2. NO HOUSEHOLD MEMBERS AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3. ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD
4. POSTPONED
5. REFUSED
6. DWELLING VACANT OR ADDRESS NOT A DWELLING
7. DWELLING DESTROYED
8. DWELLING NOT FOUND
9. OTHER (SPECIFY)

NUMBER OF HOUSEHOLD MEMBERS ☐☐

TOTAL ELIGIBLE WOMEN ☐

INTERVIEWER'S NAME/CODE ☐☐

SUPERVISER 'S NAME/CODE ☐☐

FIELD EDITOR ☐☐

KEYED BY ☐☐

The following questions refer to the people we just have listec

No.			RESIDENCE		SEX	YEAR BIRTH	AGE	EDUCATION			MARRIAGE	
								6 YEARS AND OVER		AGES 6-24	15 YEARS AND OVER	
	Please give the names of persons who are usually living in your household, starting with the head of the household. ASK: Did anyone else sleep here with your household last night, such as a visitor or a relative. (IF YES, ADD TO LIST AND FILL IN Q3-Q13)	Relationship to head of the household	Does (NAME) usually live here ?	Did (NAME) stay here last night ?	Is (NAME) male or female ?	In what year was (NAME) bron ?	How old is (NAME) ?	Has he/she ever been to school?	What is the highest level he/she attained?	Is (NAME) still in school?	What (NAME'S) current marital status?	Circle line No. for persons eligible for individual interview
	NAME	SEE BELOW	YES=1 NO=2	YES=1 NO=2	MALE=1 FEMALE=2		(COMPLETE YEAR) CHECK	YES=1 NO=2	SEE BELOW	YES=1 NO=2	SEE BELOW	
(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**
01		☐☐	1 2	1 2	1 2	☐☐	☐☐	1 2	☐	1 2	☐	01
02		☐☐	1 2	1 2	1 2	☐☐	☐☐	1 2	☐	1 2	☐	02
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	☐	1 2	☐	11
12		☐☐	1 2	1 2	1 2	☐☐	☐☐	1 2	☐	1 2	☐	12
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

Total number of eligible women ☐

CODES 3
RELATIONSHIP
- **01 HEAD**
- **02 WIFE OR HUSBAND**
- **03 SON OR DAUGHTER**
- **04 SON OR DAUGHTER IN LAW**
- **05 GRANDCHILD**
- **06 PARENT**
- **07 PARENT IN LAW**
- **08 BROTHER OR SISTER**
- **09 GRAND MOTHER AND FATHER**
- **10 OTHER RELATIVE**
- **11 ADOPTED/FOSTER/STEP CHILD**
- **12 NOT RELATED**

CODES 10
LEVEL OF EDUCATION
- **1 GRADE 1-3**
- **2 GRADE 4-8**
- **3 GRADE 9-10**
- **4 PROFESSIONAL SCHOOL**
- **5 HIGHER**
- **8 DK**

CODES 12
MARITAL STATUS
- **1 SINGLE**
- **2 MARRIED**
- **3 SEPARATED**
- **4 DIVORCED**
- **5 WIDOWED**
- **6 LIVING TOGETHER**
- **8 DK**

HOUSEHOLD QUESTIONNAIRE PAGE 3

N.o	Questions	Coding Categories	Skip to
20	In what kind of accommodation do you live most of the year?	GER (WITH 4 WALLS OR 5 WALLS) 1 GER (WITH 6 + WALLS) 2 PRIVATE HOUSE (1 - 2 ROOMS) 3 PRIVATE HOUSE (3 + ROOMS) 4 APARTMENT (1-2 ROOMS) 5 APARTMENT (3 + ROOMS) 6	24
21	What kind of heating system does your household have?	CENTRAL 1 LOCAL/COAL 2 STOVE 3	
22	Is your bathroom attached to your apartment/ house or is it separate?	ATTACHED 1 SEPARATE 2	
23	Where is your toilet located ?	INSIDE APARTMENT/HOUSE 1 OUTSIDE APARTMENT/HOUSE 2	
24	Does your household use electricity ?	YES 1 NO 2	27
25	What kind of electric supply do you have in your household?	CENTRAL 1 DIESEL ONLY 2 DIESEL AND GENERATOR 3 GENERATOR 4	27
26	Last week on how many days was your electricity supply cut off ?	DAYS ☐	
27	What is the main source of drinking water for members of your households?	CENTRAL / PIPED 1 LOCAL 2 WELL 3 SPRING WATER/ MINERAL SPRING 4 RIVER/SNOW/RAINWATER 5	
28	Does your household have any animals ?	YES 1 NO 2	30
29	How many animals do you have? ……..	CAMELS ☐☐☐ HORSES ☐☐☐ CATTLE/YAKS ☐☐☐ SHEEP ☐☐☐ GOATS ☐☐☐ PIGS/HOGS/DONKEYS ☐☐☐	
30	Is your household income enough for your average consumption?	ENOUGH 1 NOT ENOUGH 2 DON'T KNOW 8	
31	What is the fastest/ quickest way you can request for medical emergency services ? How long does it take to get emergency treatment ?	PHONE 1 BY CAR/ MOTORCYCLE 2 BY HORSE/ CAMEL/ CATTLE/ YAKS 3 WALKING 4 DON'T KNOW 8 TIME (minutes) ☐☐☐ 16 HOURS OR MORE 960 DON'T KNOW 998	

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MONGOLIAN REPRODUCTIVE HEALTH SURVEY 1998

INDIVIDUAL QUESTIONNAIRE

CLUSTER NUMBER ☐☐☐

AIMAG ☐☐

SOM ☐☐

BAG ☐☐

HOUSEHOLD NUMBER ☐☐☐

AREA* ☐

NAME AND LINE NUMBER OF WOMAN ☐☐

HUSBAND'S INTERVIEW ATTEMPTED YES=1 NO=2 ☐

*** AREA CODES :**

1. ULAANBAATAR 2. AIMAG CENTER 3. SOM CENTER 4. REMOTE RURAL

INTERVIEW VISIT

FIRST	SECOND	FINAL
DAY ☐☐	DAY ☐☐	DAY ☐☐
MONTH ☐☐	MONTH ☐☐	MONTH ☐☐
RESULTS ** ☐	RESULTS ** ☐	RESULTS ** ☐

TOTAL NUMBER OF VISITS ☐

**** RESULTS CODES**

1. COMPLETED
2. NOT AT HOME
3. POSTPONED
4. REFUSED
5. PARTLY COMPLETED
6. INCAPACITATED
7. OTHER _____ (SPECIFY)

INTERVIEWER'S NAME/CODE ☐☐

SUPERVISER 'S NAME/CODE ☐☐

FIELD EDITOR ☐☐

KEYED BY ☐☐

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SECTION 1. RESPONDENT'S BACKGROUND

No.	Questions and Filters	Coding Categories	Skip to
100	**RECORD THE TIME**	**HOUR** ☐☐ **MINUTES** ☐☐	
101	In what month and year were you born ?	MONTH ☐☐ DON'T KNOW 98 YEAR 19☐☐ DON'T KNOW 98	
102	How old are you (AGE IN COMPLETED YEARS)	AGE ☐☐	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS ☐☐ ALWAYS 95 VISITOR 96 →	105
104	Just before you moved here, did you live in a city, in an aimag center, in a som, or in the countryside?	CITY 1 AIMAG CENTER 2 SOM CENTER 3 COUNTRYSIDE 4	
105	Have you ever attended school ?	YES 1 NO 2 →	107
106	What was the highest level of school you completed ?	GRADE 1-3 1 GRADE 4-8 2 GRADE 9-10 3 PROFESSIONAL SCHOOL 4 HIGHER 5 →	108
107	Can you read and understand a letter or newspaper easily , with difficulty, or not at all ?	EASILY 1 WITH DIFFICULTY 2 NOT AT ALL 3	
108A	**CHECK: Q.102** AGE 15-24 ☐ ↓	AGE 25-49 ☐ →	111
108B	**CHECK: Q.105** ATTENDED SCHOOL ☐ ↓	NEVER ATTENDED SCHOOL ☐ →	111
109	Are you currently attending school ?	YES 1 → NO 2	111

No.	Questions and Filters	Coding Categories	Skip to
110	What was the main reason you stopped attending school ?	GOT PREGNANT 01 GOT MARRIED 02 TO CARE FOR CHILDREN 03 FAMILY NEEDED HELP 04 COULD NOT PAY SCHOOL FEES 05 NEEDED TO EARN MONEY 06 GRADUATED/ ENOUGH SCHOOLING 07 DID NOT PASS EXAMS 08 DID NOT LIKE SCHOOL 09 SCHOOL NOT ACCESSIBLE/TOO FAR 10 OTHER 96 (SPECIFY) DON'T KNOW 98	
111	**CHECK: Q106 AND Q107** CAN READ ☐ ↓ CAN NOT READ ☐ →		111B
111A	Do you usually read a newspaper at least once a week ?	YES 1 NO 2	
111B	Do you usually listen to the radio at least once a week ?	YES 1 NO 2	
111C	Do you usually watch TV at least once a week ?	YES 1 NO 2	
112	What is your religion ?	ATHEIST 1 BUDDHIST 2 MUSLIM 3 PROTESTANT/CHRISTIAN 4 OTHER 5 (SPECIFY)	

SECTION 2. REPRODUCTION

No.	Questions and Filters	Coding Categories	Skip to
200	Now I would like to ask about all the births you have had during your life? Have you ever given birth?	YES 1 NO 2 →	205
201	Do you have any sons or daughters who are living with you ?	YES 1 NO 2 →	203
202	How many sons live with you now? How many daughters live with you now?	SONS AT HOME ☐☐ DAUGHTERS AT HOME ☐☐	
203	Do you have any sons or daughters to whom you have given birth and now are not living with you ?	YES 1 NO 2 →	205
204	How many sons are alive but not living with you? And how many daughters are alive but do not live with you ?	SONS ELSEWHERE ☐☐ DAUGHTERS ELSEWHERE ☐☐	
205	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?	YES 1 NO 2 →	207
206	In all, how many boys have died? And how many girls have died?	BOYS DEAD ☐☐ GIRLS DEAD ☐☐	
207	SUM ANSWERS TO 202, 204 AND 206, AND ENTER TOTAL. IF NONE RECORD '00'.	TOTAL ☐☐	

208 **CHECK: Q207**

Just to make sure that I have this right: you have had in total _____ live births during your life. Is that correct?

YES ☐ ↓ NO ☐ → PROBE AND CORRECT 201 - 207 AS NECESSARY

209 **CHECK: 207**

ONE OR MORE LIVE BIRTHS ☐ ↓

NO LIVE BIRTH ☐ → ENTER 0 IN 220 AND ASK 221

210 Now I would like to record the name of all your births, whether still alive or not, starting with the first one you had.

211 What name was given to your (first/next) baby ? **Name**	**212** Were any of these births twins?	**213** Is (NAME) a boy or a girl?	**214** When was (NAME) HE/SHE born? **PROBE: What is his/her birthday ? Or In what season was he / she born ?**	**215** Is (NAME) still alive ?	**216** **IF ALIVE** How old was (NAME) at his/her last birthday? **RECORD AGE IN COMPLETED YEARS**	**217** **IF ALIVE** Is (NAME) living with you ?	**218** **IF ALIVE** With whom does HE/SHE live ? Father fostered adopted school >18 years= now adult	**219** How old was (NAME) when HE/SHE died **IF '1 YR.' , PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS**
O1	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O2	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O3	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O4	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O5	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O6	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O7	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐

211 What name was given to your (first/next) baby ? **Name**	212 Were any of these births twins?	213 Is (NAME) a boy or a girl?	214 When was (NAME) HE/SHE born? **PROBE: What is his/her birthday ? Or In what season was he / she born ?**	215 Is (NAME) still alive ?	216 **IF ALIVE** How old was (NAME) at his/her last birthday? **RECORD AGE IN COMPLETED YEARS**	217 **IF ALIVE** Is (NAME) living with you ?	218 **IF ALIVE** With whom does HE/SHE live ? Father fostered adopted school >18 years= now adult	219 How old was (NAME) when HE/SHE died **IF '1 YR.' , PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS**
O8	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
O9	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
10	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
11	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
12	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐
13	SINGLE 1 MULT. 2	BOY=1 GIRL=2	MONTH ☐☐ YEAR ☐☐	YES = 1 NO = 2 → **219**	AGE IN YEARS ☐☐	YES 1 NO 2 **(NEXT BIRTH)**	FATHER 1 FOSTERED 2 ADOPTED 3 SCHOOL 4 NOW ADULT 5 **(NEXT BIRTH)**	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐

220 COMPARE 207 WITH NUMBER OF BIRTHS ABOVE AND MARK:

NUMBERS ARE SAME ☐ ↓

NUMBERS ARE DIFFERENT ☐ → (PROBE AND RECONCILE)

CHECK: FOR EACH LIVE BIRTH YEAR OF BIRTH IS RECORDED: (Q.214) ☐
FOR EACH LIVING CHILD CURRENT AGE IS RECORDED: (Q.216) ☐
FOR EACH DEAD BIRTH AGE AT DEATH IS RECORDED: (Q.219) ☐
FOR AGE AT DEATH 12 MONTHS OR ONE YEAR (Q.219): ☐
PROBE TO DETERMINE EXACT NUMBER OF MONTHS
ENTER NUMBER OF BIRTHS SINCE JANUARY, 1990 ☐

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No.	Questions and Filters	Coding Categories	Skip to
221	Are you pregnant now?	YES 1 NO 2 UNSURE 8 →	224
222	How many months are you pregnant?	MONTHS ☐	
223	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?	THEN 1 LATER 2 NOT AT ALL 3	
224	At what age did your first menstrual period start?	AGE ☐☐ NEVER MENSTRUATED 96 → DON'T KNOW 98	300
225	Before having your first menstrual period, from whom did you learn about menstruation?	NO ONE 00 PARENTS 01 SISTER 02 RELATIVES 03 FRIENDS 04 DOCTOR 05 TEACHER 06 MASS MEDIA 07 OTHER 96 (SPECIFY)	
226	Between the first day of a woman's period and the first day of her next period, are there certain times when she has greater chance of becoming pregnant than other times?	YES 1 NO 2 DON'T KNOW 8 →	228
227	During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant?	ANY DAY OF THE CYCLE 1 RIGHT AFTER HER PERIOD HAS ENDED 2 IN THE MIDDLE OF THE CYCLE 3 JUST BEFORE HER PERIOD BEGINS 4 DON'T KNOW 8	
228	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO 1 ☐☐ WEEKS AGO 2 ☐☐ MONTHS AGO 3 ☐☐ YEARS AGO 4 ☐☐ WOMB REMOVED 993 IN MENOPAUSE 994 BEFORE LAST BIRTH 995	

SECTION 3A. PREGNANCY AND BREASTFEEDING

300 **CHECK Q. 220**

ONE OR MORE BIRTHS SINCE JANUARY, 1990 ☐ ↓ NO BIRTHS SINCE JANUARY, 1990 ☐ → **400**

301 ENTER THE LINE NUMBER, NAME, SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY1990 IN THE TABLE. ASK ALL QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE ADDITIONAL QUESTIONNAIRE.)

302A	LINE NUMBER FROM Q. 211	LINE NUMBER ☐☐	LINE NUMBER ☐☐	LINE NUMBER ☐☐
302B	NAME FROM Q. 211	LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
302C	SURVIVAL STATUS FROM Q. 215	Alive ☐ Dead ☐	Alive ☐ Dead ☐	Alive ☐ Dead ☐
303	At the time you become 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 ?	THEN 1 LATER 2 NO MORE 3	THEN 1 LATER 2 NO MORE 3	THEN 1 LATER 2 NO MORE 3
304	When you were pregnant with (NAME), did you see anyone for antenatal care for this pregnancy? If Yes: Whom did you see? Anyone else?	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER MIDWIFE D MEDICAL ASSISTANT E TRADITIONAL HEALER F OTHER X (SPECIFY) NO ONE Y **SKIP TO 306B**	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER MIDWIFE D MEDICAL ASSISTANT E TRADITIONAL HEALER F OTHER X (SPECIFY) NO ONE Y **SKIP TO 309A**	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER MIDWIFE D MEDICAL ASSISTANT E TRADITIONAL HEALER F OTHER X (SPECIFY) NO ONE Y **SKIP TO 309A**
305	Where did you go for antenatal care for this pregnancy? Health Center - H.Center	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 OTHER 5 (SPECIFY)	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 OTHER 5 (SPECIFY)	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 OTHER 5 (SPECIFY)
306A	How many months pregnant were you when you first recieved antenatal care?	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98 **SKIP TO 309A**	MONTHS ☐☐ DON'T KNOW 98 **SKIP TO 309A**
306B	Did you have any difficulties in carrying this pregnancy?	YES 1 NO 2 **SKIP TO 306D**		

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
306C	What difficulty or difficulties did you have? Any other? CIRCLE ALL MENTIONED	HIGH BLOOD PRESSURE A SWELLING B WRONG POSITION OF FETUS C PLANCENTA TOO LOW D RUPTURED UTERUS E NARROW PELVIS F TOO MUCH FLUID G OTHER X **(SPECIFY)**		
306D	When you were pregnant with (NAME) did you fall ill with any of the following diseases? READ LIST	YES NO HEART DISEASE 1 2 KIDNEY DISEASE 1 2 LIVER DISEASE 1 2 LUNG DISEASE 1 2 DISEASE OF DIGESTIVE APPARATUS 1 2 NERVOUS DISEASE 1 2		
307	Did you receive iron pills when you were pregnant with (NAME)?	YES 1 NO 2 **SKIP TO 309A**		
308	How many iron pills did you take during your pregnancy with (NAME)?	TOTAL [ ][ ][ ] DON'T KNOW 998		
309A	Did you stay in a maternal rest house before the birth of (NAME)?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
309B	Where did you give birth to NAME? Health Center - H.Center	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 AT HOME 5 OTHER HOME 6 OTHER 7 **(SPECIFY)**	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 AT HOME 5 OTHER HOME 6 OTHER 7 **(SPECIFY)**	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 AT HOME 5 OTHER HOME 6 OTHER 7 **(SPECIFY)**
310	Who assisted with the delivery of (NAME)?	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER MIDWIFE D MEDICAL ASSISTANT E TRADITIONAL HEALER F OTHER X **(SPECIFY)** NO ONE Y	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER MIDWIFE D MEDICAL ASSISTANT E TRADITIONAL HEALER F OTHER X **(SPECIFY)** NO ONE Y	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER MIDWIFE D MEDICAL ASSISTANT E TRADITIONAL HEALER F OTHER X **(SPECIFY)** NO ONE Y

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
311	Was (NAME) delivered by caesarean section?	YES 1 **SKIP TO 313** NO 2	YES 1 **SKIP TO 313** NO 2	YES 1 **SKIP TO 313** NO 2
312A	At the time of the birth of (Name), did you have any of the following problems?			
	Prolonged contractions lasting for more than 12 hours?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
312B	A lot more vaginal bleeding than normal following childbirth (more than 3 cloths)?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
312C	A high fever and foul smelling vaginal discharge?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
312D	Convulsions or fits not caused by fever?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
313	Was (NAME) born on time or prematurely?	ON TIME 1 PREMATURELY 2 DON'T KNOW 8	ON TIME 1 PREMATURELY 2 DON'T KNOW 8	ON TIME 1 PREMATURELY 2 DON'T KNOW 8
314	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8	VERY LARGE 1 LARGER THAN AVERAGE 2 AVERAGE 3 SMALLER THAN AVERAGE 4 VERY SMALL 5 DON'T KNOW 8
315	Was (NAME) weighed at birth?	YES 1 NO 2 **SKIP TO 317**	YES 1 NO 2 **SKIP TO 318**	YES 1 NO 2 **SKIP TO 318**
316	How much did (NAME) weigh? Record weight from health card, IF AVAILABLE	GRAMS FROM CARD 1 GRAMS FROM RECALL 2 GRAMS ☐☐☐☐ DON'T KNOW 9998	GRAMS FROM CARD 1 GRAMS FROM RECALL 2 GRAMS ☐☐☐☐ DON'T KNOW 9998 **SKIP TO 318**	GRAMS FROM CARD 1 GRAMS FROM RECALL 2 GRAMS ☐☐☐☐ DON'T KNOW 9998 **SKIP TO 318**
317	Has your period returned since the birth of (NAME)?	YES 1 **SKIP TO 319** NO 2 **SKIP TO 320**		

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		LAST BIRTH NAME ____	NEXT TO LAST BIRTH NAME ____	SECOND FROM LAST BIRTH- NAME ____
318	Did your period return between the birth of (NAME) and the next pregnancy?		YES 1 NO 2 (SKIP TO 322)	YES 1 NO 2 (SKIP TO 322)
319	For how many months after the birth of (NAME) did you not have a period?	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98 (SKIP TO 322)	MONTHS ☐☐ DON'T KNOW 98 (SKIP TO 322)
320	**CHECK :Q. 221** RESPONDENT PREGNANT?	Not pregnant ☐ Pregnant or unsure ☐ **SKIP 322**		
321	Have you resumed sexual relations since the birth of (NAME)?	YES 1 NO 2 **SKIP TO 323**		
322	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98
323	Did you ever breastfeed (NAME)?	YES 1 **SKIP TO 325** NO 2	YES 1 **SKIP TO 328** NO 2	YES 1 **SKIP TO 328** NO 2
324	Why did you not breastfeed (NAME)?	CHILD DIED 01 CHILD ILL/WEAK 02 MOTHER ILL/WEAK 03 NIPPLE/BREAST PROBLEM 04 NO MILK 05 MOTHER WORKING. 06 MOTHER STUDYING 07 CHILD REFUSED 08 KEEPING BREAST BEATIFUL 09 OTHER 96 **(SPECIFY)** **SKIP TO 330**	CHILD DIED 01 CHILD ILL/WEAK 02 MOTHER ILL/WEAK 03 NIPPLE/BREAST PROBLEM 04 NO MILK 05 MOTHER WORKING. 06 MOTHER STUDYING 07 CHILD REFUSED 08 KEEPING BREAST BEATIFUL 09 OTHER 96 **(SPECIFY)** **SKIP TO 330**	CHILD DIED 01 CHILD ILL/WEAK 02 MOTHER ILL/WEAK 03 NIPPLE/BREAST PROBLEM 04 NO MILK 05 MOTHER WORKING. 06 MOTHER STUDYING 07 CHILD REFUSED 08 KEEPING BREAST BEATIFUL 09 OTHER 96 **(SPECIFY)** **SKIP TO 330**
325	**CHECK 302 C:** CHILD ALIVE?	ALIVE ☐ DEAD ☐ **SKIP TO 328**		
326	Are you still breadfeeding (NAME) ?	YES 1 NO 2 **SKIP TO 328**		

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
327	At any time yesterday was (NAME) given any of the following in addition to breast milk Plain water ? Tinned or fresh milk ? Any other liquids ? Any solid or mushy food ?	YES NO DK 1 2 8 1 2 8 1 2 8 1 2 8 **SKIP TO 330**		
328	How many months did you breastfeed (NAME)?	MONTHS ..... [ ][ ] DON'T KNOW 98	MONTHS ..... [ ][ ] DON'T KNOW 98	MONTHS ..... [ ][ ] DON'T KNOW 98
329	Why did you stop breastfeeding (NAME)?	CHILD DIED 01 MOTHER/ILL/WEAK 02 NO MILK 03 MOTHER WORKING 04 MOTHER STUDYING 05 CHILD REFUSED 06 BECAME PREGNANT 07 WEANING AGE 08 OTHER 96 **(SPECIFY)**	CHILD DIED 01 MOTHER/ILL/WEAK 02 NO MILK 03 MOTHER WORKING 04 MOTHER STUDYING 05 CHILD REFUSED 06 BECAME PREGNANT 07 WEANING AGE 08 OTHER 96 **(SPECIFY)**	CHILD DIED 01 MOTHER/ILL/WEAK 02 NO MILK 03 MOTHER WORKING 04 MOTHER STUDYING 05 CHILD REFUSED 06 BECAME PREGNANT 07 WEANING AGE 08 OTHER 96 **(SPECIFY)**

SECTION 3B. CHILD HEALTH

		LAST BIRTH	NEXT TO LAST BIRTH	SECOND FROM LAST BIRTH-
330	FROM Q302B AND Q302C	NAME ALIVE ☐ DEAD ☐ (GO TO 303 IN NEXT COLUMN, OR, IF NO MORE BIRTHS, GO TO 400)	NAME ALIVE ☐ DEAD ☐ (GO TO 303 IN NEXT COLUMN, OR, IF NO MORE BIRTHS, GO TO 400)	NAME ALIVE ☐ DEAD ☐ (GO TO 303 IN NEXT COLUMN, OR, IF NO MORE BIRTHS, GO TO 400)
331	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
332	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES 1 NO 2 **SKIP TO 336** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 336** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 336** DON'T KNOW 8
333	When (NAME) was ill with a cough did he/she breathe more rapidly than usual with short, rapid breaths?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
334	Did you seek advice or treatment for the cough?	YES 1 NO 2 **SKIP TO 336**	YES 1 NO 2 **SKIP TO 336**	YES 1 NO 2 **SKIP TO 336**
335	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC HOSPITAL A PRIVATE HOSPITAL B PHARMACY C TRADITIONAL DOCTOR D FRIEND (DOCTOR) E OTHER X **(SPECIFY)**	PUBLIC HOSPITAL A PRIVATE HOSPITAL B PHARMACY C TRADITIONAL DOCTOR D FRIEND (DOCTOR) E OTHER X **(SPECIFY)**	PUBLIC HOSPITAL A PRIVATE HOSPITAL B PHARMACY C TRADITIONAL DOCTOR D FRIEND (DOCTOR) E OTHER X **(SPECIFY)**
336	Has (NAME) had diarrhea in the last two weeks?	YES 1 NO 2 **SKIP TO 343** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 343** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 343** DON'T KNOW 8
337	Was there any blood in the stools?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
338	Was he/she given the same amount to drink as before the diarrhea, or more, or less?	SAME 1 MORE 2 LESS 3 DON'T KNOW 8	SAME 1 MORE 2 LESS 3 DON'T KNOW 8	SAME 1 MORE 2 LESS 3 DON'T KNOW 8

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
339	Was anything given to treat the diarrhea?	YES 1 NO 2 **SKIP TO 341** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 341** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 341** DON'T KNOW 8
340	What was given to treat the diarrhea? Anything else? RECORD ALL MENTIONED.	PILL OR SYRUP A INJECTION B (I.V.) INTRAVENOUS C HOME REMEDIES/ HERBAL MEDICINES D OTHER X **(SPECIFY)**	PILL OR SYRUP A INJECTION B (I.V.) INTRAVENOUS C HOME REMEDIES/ HERBAL MEDICINES D OTHER X **(SPECIFY)**	PILL OR SYRUP A INJECTION B (I.V.) INTRAVENOUS C HOME REMEDIES/ HERBAL MEDICINES D OTHER X **(SPECIFY)**
341	Did you seek advice or treatment for the diarrhea?	YES 1 NO 2 **SKIP TO 343**	YES 1 NO 2 **SKIP TO 343**	YES 1 NO 2 **SKIP TO 343**
342	Where did you seek advice or treatment? Anywhere else? RECORD ALL MENTIONED.	PUBLIC HOSPITAL A PRIVATE HOSPITAL B PHARMACY C TRADITIONAL DOCTOR D FRIEND (DOCTOR) E OTHER X **(SPECIFY)**	PUBLIC HOSPITAL A PRIVATE HOSPITAL B PHARMACY C TRADITIONAL DOCTOR D FRIEND (DOCTOR) E OTHER X **(SPECIFY)**	PUBLIC HOSPITAL A PRIVATE HOSPITAL B PHARMACY C TRADITIONAL DOCTOR D FRIEND (DOCTOR) E OTHER X **(SPECIFY)**
343		GO BACK TO 303 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 400	GO BACK TO 303 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 400	GO BACK TO 303 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 400

SECTION 4. CONTRACEPTION

400. **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.**

CIRCLE CODE 1 IN 401 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 402, 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 401 OR 402, ASK 403.

401 Which ways or methods have you heard about ?		**402** Have you ever heard of (METHOD) ?		**403** Have you ever used (METHOD) ?
	SPONTANEOUS YES	PROBED YES	NO	
O1 **PILL** "Women can take a pill every day"	1	2	3	YES 1 NO 2
O2 **IUD** "Women can have a loop or coil placed inside them by a doctor or nurse".	1	2	3	YES 1 NO 2
O3 **INJECTIONS** "Women can have an injection by a doctor or nurse which stops them from becoming pregnant for 1,2 or 3 months	1	2	3	YES 1 NO 2
O4 **NORPLANT/IMPLANT** "Women can get 6 rods under the skin in the upper arm to prevent pregnancy"	1	2	3	YES 1 NO 2
O5 **DIAPHRAGM/FOAM/JELLY** "Women can place a tissue or a diaphragm or cream in the vagina before intercourse".	1	2	3	YES 1 NO 2
O6 **CONDOM** "Men can use a rubber sheath during sexual intercourse".	1	2	3	YES 1 NO 2
O7 **FEMALE STERILIZATION** "Women can have an operation to avoid having any more children".	1	2	3	Have you ever had an operation to avoid having any more children? YES 1 NO 2
O8 **MALE STERILIZATION** "Men can have an operation to avoid having any more children".	1	2	3	Have you ever had a partner who had an operation to avoid having children ? YES 1 NO 2
O9 **PERIODIC ABSTINENCE/CALENDAR SYSTEM** "Couples can aviod having sexual intercourse on certain days of the month when the women is more likely to become pregnant".	1	2	3	YES 1 NO 2
1O **WITHDRAWAL** "Men can be careful and pull out before climax".	1	2	3	YES 1 NO 2
11 Have you heard of any other ways or methods that women or men use to avoid pregnancy ?	1 _____ (SPECIFY) _____ (SPECIFY)		3	YES 1 NO 2 YES 1 NO 2

404	**CHECK Q.403:**	NOT A SINGLE " YES " ☐	AT LEAST ONE " YES " ☐ →	**406**

No.	Questions and Filters	Coding Categories	Skip to
405	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES 1 NO 2 →	420
405A	What have you used or done ? CORRECT 403 AND 404 (AND 402 IF NECESSARY)		
406	Now I would like to ask you about the first time that you did something or used a method to delay a pregnancy or avoid getting pregnant. What is the first thing you ever did or method you ever used to delay or aviod getting pregnant?	PILL 01 IUD 02 INJECTIONS 03 IMPLANTS/NORPLANT 04 DIAPHRAGM /FOAM/JELLY 05 CONDOM 06 FEMALE STERILIZATION 07 MALE STERILIZATION 08 PERIODIC ABSTINENCE 09 WITHDRAWAL 10 OTHER 96 (SPECIFY)	
407	How many living children did you have at that time, if any?	NUMBER OF CHILDREN ☐☐	
408	What was your age when you first started using any method?	AGE (COMPLETED YEARS) ☐☐ DON'T KNOW 98	
409A	**CHECK Q.221: PREGNANT STATUS** NOT PREGNANT OR OR UNSURE ☐ ▼	CURRENTLY PREGNANT ☐ →	420
409B	Are you using any method now?	YES 1 NO 2 →	420
410	IF WOMAN DECCARED SHE WAS STERILIZED IN Q.403, CIRCLE CODE 07 AND SKIP TO Q. 412. OTHERWISE ASK: Which method are you using?	PILL 01 IUD 02 INJECTIONS 03 IMPLANTS/NORPLANT 04 DIAPHRAGM /FOAM/JELLY 05 CONDOM 06 FEMALE STERILIZATION 07 → MALE STERILIZATION 08 PERIODIC ABSTINENCE 09 WITHDRAWAL 10 OTHER 96 (SPECIFY)	412
411	For how many months have you been using this (MEDHOD) continuously ?	MONTHS ☐☐ → 8 YEARS OR LONGER 96	413
412	In what month and year was the sterilization ?	YEAR 19☐☐ MONTH ☐☐ DON'T KNOW 98	

No.	Questions and Filters	Coding Categories	Skip to
413	**CHECK Q.410 :** PILL ☐ IUD ☐ INJECTION ☐ NORPLANT/IMPLANT ☐ DIAPHRAGM/FOAM/JELLY ☐ CONDOM ☐ FEMALE STERILIZATION ☐ MALE STERILIZATION ☐ PERIODIC ABSTINENCE ☐ WITHDRAWAL ☐ OTHER ☐		→ 416
414	Is there service fee or purchase cost to obtain the method? IF ANY: How much does it cost (for one time)?(tug)	PURCHASE 1 SERVICE FEE 2 NO FEE 3 TUGRUG ☐☐☐☐☐☐	
415	From whom did you get it the last time?	PUBLIC HOSPITAL 01 PRIVATE HOSPITAL 02 PHARMACY 03 TRADITIONAL DOCTOR 04 SHOP 05 FRIENDS 06 PARENTS/RELATIVES 07 OTHER 96 **(SPECIFY)**	
416	Do you have any problem with the method you are using now?	YES 1 NO 2 →	418
417	What is the main problem?	HUSBAND DISAPPROVES 01 ACCESSIBILITY /AVAILABILITY 02 COST TOO MUCH 03 INCONVENIENT TO USE 04 STERILIZED BUT WANTS CHILDREN 05 HEALTH CONCERNS 06 SIDE EFFECTS 07 OTHER 96 **(SPECIFY)** DON'T KNOW 98	
418	What was the last method you used before the present method?	NEVER USED OTHER METHOD 00 → PILL 01 IUD 02 INJECTIONS 03 IMPLANTS/NORPLANT 04 DIAPHRAGM /FOAM/JELLY 05 CONDOM 06 FEMALE STERILIZATION 07 MALE STERILIZATION 08 PERIODIC ABSTINENCE 09 WITHDRAWAL 10 OTHER 96 **(SPECIFY)**	423

No.	Questions and Filters	Coding Categories	Skip to
419	Why did you change the method?	DIFFICULT TO GET THE METHOD 01 METHOD BECAME COSTLY 02 KNOWLEDGE OF OTHER METHODS BECAME AVAILABLE 03 METHOD LESS EFFECTIVE OR NOT EFFECTIVE 04 HEALTH/SIDE EFFECTS 05 HUSBAND/PARTNER PREFERENCE 06 DOCTORS RECOMMENDATIONS 07 OTHER 96 (SPECIFY)	423
420	Do you intend to use one of the methods in the future?	YES 1 NO 2 DON'T KNOW 8	422 423
421	Which method do you wish to use?	PILL 01 IUD 02 INJECTIONS 03 IMPLANTS/NORPLANT 04 DIAPHRAGM/FOAM/JELLY 05 CONDOM 06 FEMALE STERILIZATION 07 MALE STERILIZATION 08 PERIODIC ABSTINENCE 09 WITHDRAWAL 10 OTHER 96 (SPECIFY) DON'T KNOW 98	423
422	What is the main reason you do not intend to use a method?	NOT MARRIED 11 **FERTILITY- RELATED REASONS** NOT HAVING SEX 21 INFREQUENT SEX 22 MENOPAUSAL/HYSTERECTOMY 23 SUBFECUND/INFECUND 24 POSTPARTUM/BREASTFEEDING 25 WANTS (MORE) CHILDREN 26 **OPPOSITION TO USE** RESPONDENT OPPOSED 31 HUSBAND OPPOSED 32 OTHERS OPPOSED 33 RELIGIOUS PROHIBITION 34 **LACK OF KHOWLEDGE** KNOWS NO MEDHOD 41 KNOWS NO SOURCE 42 **MEDHOD -RELATED REASONS** HEALTH CONCERNS 51 FEAR OF SIDE EFFECTS 52 LACK OF ACCESS/TOO FAR 53 COST TOO MUCH 54 INCONVENIENT TO USE 55 INTERFERES WITH BODY'S NORMAL PROCESSES 56 OTHER 96 (SPECIFY) DON' T KNOW 98	

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No.	Questions and Filters	Coding Categories	Skip to
423	CHECK: Q,401 AND Q, 402 KNOWS ABOUT FEMALE STERILIZATION	DOES NOT KNOW ABOUT FEMALE STERILIZATION →	426
424	Do you approve of a woman having a sterilization operation, or do you disapprove, or doesn't it matter to you?	APPROVE 1 → 426 DISAPPROVE 2 DOESN'T MATTER 3 → 426	
425	Why do you disapprove?	WANTS CHILDREN 01 RELIGIOUS REASONS/TRADITION 02 NOT NATURAL (NORMAL) 03 NOT HEALTHY 04 FEAR OF SIDE EFFECTS 05 COSTS TOO MUCH 06 PARTNER DISAPPROVES 07 REDUCES SEXUAL DRIVE 08 OTHER 96 (SPECIFY) DON'T KNOW 98	
426	CHECK: Q,401 AND Q, 402 KNOWS ABOUT MALE STERILIZATION	DOES NOT KNOW ABOUT MALE STERILIZATION →	500
427	Do you approve of a man having a vasectomy, or do you disapprove, or doesn't it matter to you?	APPROVE 1 → 500 DISAPPROVE 2 DOESN'T MATTER 3 → 500	
428	Why do you disapprove?	WANTS CHILDREN 01 RELIGIOUS REASONS/TRADITION 02 NOT NATURAL (NORMAL) 03 NOT HEALTHY 04 FEAR OF SIDE EFFECTS 05 COSTS TOO MUCH 06 PARTNER DISAPPROVES 07 REDUCES SEXUAL DRIVE 08 CASTRATION COMPLEX 09 OTHER 96 (SPECIFY) DON'T KNOW 98	

SECTION 5. MARRIAGE

No.	Questions and Filters	Coding Categories	Skip to
500	Are you currently married or living together with a man, or are you single , or separated, divorced, or widowed ?	SINGLE 1 MARRIED 2 SEPARATED 3 DIVORCED 4 WIDOWED 5 LIVING TOGETHER 6	504
501	Have you been married or lived with a man only once, or more than once?	ONCE 1 MORE THAN ONCE 2	
502	**CHECK : 501** MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your husband/parther? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now we will talk about your first husband/ parther. In what month and year did you start living with him?	YEAR ☐☐ DON' T KNOW 08 MONTH ☐☐ DON' T KNOW 98	
503	How old were you when you started living with him?	AGE ☐☐	505
504	At what age did you first have sexual relations if ever ?	AGE ☐☐ NEVER HAD SEXUAL RELATIONS 00 DON'T REMEMBER 98	600
505	**CHECK : 500** MARRIED / LIVING TOGETHER ☐ SEPARATED DIVORCED/WIDOWED ☐		600
506	Now I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4 ☐☐ BEFORE LAST BIRTH 996	

SECTION 6. FERTILITY PREFERENCES

No.	Questions and filters	Coding categories	Skip to
600	CHECK: Q 410 — SHE NOT STERILIZED ☐ / SHE STERILIZED ☐ →		606
601	CHECK: Q 221 — Not pregnant. or unsure ☐ / Pregnant ☐		
	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?	HAVE A (ANOTHER) CHILD 1 NO MORE/NONE 2 → 605 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED OR DON'T KNOW 4 → 606	
	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 have any more children?		
602	How many (more) children do you want?	MORE CHILDREN ☐☐	
603	What is the main reason you want (more) children?	DOES NOT HAVE CHILD 1 NOT ENOUGH CHILDREN 2 HAVE NO SON/DAUGHTER 3 CUSTOM OR RELIGION 4 HUSBAND RECOMMENDS 5 HELP FAMILY ECONOMY 6 OTHER 7 (SPECIFY)	
604	CHECK: Q 221 — Not pregnant, unsure ☐ / Pregnant ☐	WAITING TIME	
	Not pregnant, unsure: How long would you like to wait from now before the birth of (a/another) child?	YEARS 1 ☐☐ MONTHS 2 ☐☐ SOON/NOW 993 CAN'T GET PREGNANT 994 AFTER MARRIAGE 995 OTHER 996 (SPECIFY) DON'T KNOW 998	606
	Pregnant: How long would you like to wait after the birth of the child you are expecting before the birth of another child?		
605	What is the main reason you don't want another child?	HAVE ENOUGH CHILDREN 1 TOO OLD 2 HEALTH 3 UNABLE TO SUPPORT 4 TOO BUSY 5 OTHER 6 (SPECIFY)	

No.	Questions and filters	Coding categories	Skip to
606	**CHECK: Q 215** Has living children → If you could go back to the time when you had no children and could choose exactly the number of children to have in your whole life, how many would that be? No living children → If you could choose exactly the number of children to have in your whole life, how many would that be?	NUMBER OF CHILDREN ☐☐ OTHER _____	
607	Do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVE 1 DISAPPROVE 2 DON'T KNOW 8	
608	In the last month, have you heard or seen a message about family planning on: the radio? the television? newspaper or magazine? a poster or billboard?	YES NO THE RADIO? 1 2 THE TELEVISION? 1 2 NEWSPAPER/MAGAZINE/BOOK? 1 2 A POSTER OR BILLBOARD? 1 2	
609	In the last few months have you discussed family planning with your friends, neighbors, or relatives?	YES 1 NO 2 →	611
610	With whom did you discuss ? With anyone else?	HUSBAND/PARTNER A PARENT B SISTERS/BROTHERS C DAUGHTER D MOTHER - IN - LAW E NEIGHBORS F OTHER X **(SPECIFY)**	
611	**CHECK Q:500** MARRIED OR LIVING TOGETHER →	SINGLE, DIVORCED SEPARATED, WIDOWED ☐ →	614
612	Now I would like to ask your husband's attitude about family planning. Do you think your husband/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES 1 DISAPPROVES 2 DON'T KNOW 8	
613A	Have you and your husband/partner ever discussed the number of children you would like to have? (IF YES :) How often ?	NEVER DISCUSSED 1 ONE OR TWO TIMES 2 OFTEN 3	
613B	Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER 1 MORE CHILDREN 2 FEWER CHILDREN 3 DON'T KNOW 8	

No.	Questions and filters	Coding categories	Skip to
614	Sometimes a woman becomes pregnant when she does not want to be. In the past, have you ever become pregnant when you did not want to be?	YES 1 NO 2 →	700
615	When was the last time that you became pregnant when you did not want to be?	YEAR 19 ☐☐ MONTH ☐☐	
616	On this occasion, what did you do about it?	STOPPED PREGNANCY (ABORTED) 1 ATTEMPTED TO STOP THE PREGNANCY BUT FAILED 2 NOTHING/CONTINUED PREGNANCY 3 →	700
617	How did you do it ?	HERBS 1 TABLET 2 MASSAGE/SQUEEZING ABDOMEN 3 INJECTION 4 SUCTION 5 OBJECT IN WOMB 6 OTHER 7 (SPECIFY) DON'T KNOW 8	
618	Who helped you?	GYNECOLOGIST 01 OTHER DOCTOR 02 PROF. MIDWIFE 03 OTHER MIDWIFE 04 MEDICAL ASSISTANT 05 TRADITIONAL HEALER 06 NO ONE 07 OTHER 96 (SPECIFY)	
619	As a result of (stopping/attempting to stop) the pregnancy, did you have any health problems which required medical attention?	YES 1 NO 2 →	700
620	Was it necessary for you to be hospitalized?	YES 1 NO 2	

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

No.	Questions and Filters	Coding Categories	Skip to
700	**CHECK Q:500** CURRENTLY MARRIED/ LIVING WITH A MAN ☐ SEPARATED/ DIVORCED ☐		702
	WIDOWED/ NEVER MARRIED ☐		706
701	How old was your husband/partner on his last birthday?	AGE ☐☐	
702	Did your (last) husband/partner ever attend school?	YES 1 NO 2	704A
703	What was the highest level of school he completed ?	GRADE 1-3 1 GRADE 4-8 2 GRADE 9-10 3 PROFESSIONAL SCHOOL 4 HIGHER 5 DON'T KNOW 8	
704A	What is/was your husband/partner's usual occupation? That is, what kind of work does/did he mainly do?	DESCRIBE: ☐☐☐	
704B	**CHECK: Q500** MARRIED OR LIVING TOGETHER ☐ DIVORCED SEPARATED ☐		706
704C	Is your husband/partner employed now, or is he unemployed?	EMPLOYED (OR SELF-EMPLOYED) 1 UNEMPLOYED 2	705
704D	In which sector of the economy does he work?	SELF EMPLOYMENT 1 PUBLIC SECTOR 2 PRIVATE SECTOR 3 NON-GOVERNMENTAL ORGANIZATION 4	
705	Does your husband/partner smoke cigarettes ? IF YES : About how many cigarettes does he usually smoke a day?	DOES NOT SMOKE 00 NUMBER ☐☐ 96 OR MORE 96 DON'T KNOW 98	

No.	Questions and Filters	Coding Categories	Skip to
706	Aside from your own housework, are you currently working?	YES 1 → NO 2	709A
707	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?	YES 1 → NO 2	709A
708	Have you done any work in the last 12 months?	YES 1 NO 2 →	717
709A	What is your occupation, that is, what kind of work do you mainly do ?	DESCRIBE: _____ _____ _____ _____ ☐☐☐	
709B	In which sector of the economy do you work?	SELF EMPLOYMENT 1 PUBLIC SECTOR 2 PRIVATE SECTOR 3 NON-GOVERNMENTAL ORGANIZATION 4	
710	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 → SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3 →	712 713
711	During the last 12 months, how many months did you work?	NUMBER OF MONTHS ☐☐	
712	During the last 12 months, how many days a week did you usually work (in the months that you worked)?	NUMBER OF DAYS ☐ →	714
713	During the last 12 months, approximately how many days did you work?	NUMBER OF DAYS ☐☐☐	
714	Do you earn cash for your work? (PROBE: Do you make money for working?)	YES 1 NO 2 →	717

No.	Questions and Filters	Coding Categories	Skip to
715	As a result of your job, you receive salary. Do you think it is a suitable amount or not?	SUITABLE 1 NOT SUITABLE 2	
716	**CHECK Q: 500** Currently married/ living with a man ☐ → Who mainly decides how the money you earn will be used: you, your husband/ partner, you and your husband jointly, or someone else? Not in a union ☐ → Who mainly decides how the money you earn will be used: you, someone else, or you and someone else jointly	RESPONDENT DECIDES 1 HUSBAND/PARTNER DECIDES 2 JOINTLY WITH HUSBAND/PARTNER 3 PARENTS/SOMEONE ELSE 4 JOINTLY WITH SOMEONE ELSE/PARENTS 5	
717	Do you smoke cigarettes ? IF YES : About how many cigarettes do you usually smoke a day?	DO NOT SMOKE 00 → **800** NUMBER ☐☐ 96 OR MORE 96 DON'T KNOW 98	
718	At what age did you start smoking ?	AGE ☐☐	

SECTION 8. AIDS

No.	Questions and Filters	Coding Categories	Skip to
800	Have you ever heard of an illness called AIDS ?	YES 1 NO 2 →	808
801	From which sources of information have you learned most about AIDS ? Any other sources ? RECORD ALL MENTIONED.	RADIO A TV B NEWSPAPERS/MAGAZINES C PAMPHLETS/POSTERS D HEALTH WORKERS E MOSQUES/CHURCHES F SCHOOLS/TEACHERS G COMMUNITY MEETINGS H FRIENDS/RELATIVES I WORK PLACE J OTHER X (SPECIFY)	
802	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS ?	YES 1 NO 2 DON'T KNOW 8 →	804
803	What can a person do ? Any other ways ? RECORD ALL MENTIONED.	ABSTAIN FROM SEX A USE CONDOMS B HAVE ONLY ONE SEX PARTNER C AVOID SEX WITH PROSTITUTES D AVOID SEX HOMOSEXUALS E AVOID BLOOD TRANSFUSIONS F AVOID INJECTIONS G AVOID KISSING H AVOID MOSQUITO BITES I SEEK PROTECTION FROM TRADITIONAL HEALER J OTHER X (SPECIFY) DON'T KNOW Z	
804	Is it possible for a healthy-looking person to have the AIDS virus ?	YES 1 NO 2 DON'T KNOW 8	
805	Do you think that persons with AIDS almost never die from the disease, sometimes die, or almost always die from the disease ?	ALMOST NEVER 1 SOMETIMES 2 ALMOST ALWAYS 3 DON'T KNOW 8	

No.	Questions and Filters	Coding Categories	Skip to
806	Do you think your chances of getting AIDS are small, moderate, great or no risk at all?	SMALL 1 MODERATE 2 GREAT 3 NO RISK AT ALL 4 DON'T KNOW 8	
807	Has your knowledge of AIDS influenced or changed your decisions about having sex or your sexual behavior ? IF YES, PROBE: In what way ? RECORD ALL MENTIONED.	DID NOT START SEX A STOPPED ALL SEX B START ED USING CONDOMS C RESTRICTED SEX TO ONE PARTNER D REDUCED NUMBER OF PARTNERS E OTHER X (SPECIFY) NO CHANGE IN SEXUAL BEHAVIOR Y DON'T KNOW Z	
808	**RECORD THE TIME**	**HOUR** ☐☐ **MINUTES**	

INTERVIEWER'S COMMENTS

EDITOR'S COMMENTS

APPROVED BY NATIONAL STATISTICAL OFFICE OF MONGOLIA N.o . . . RHS-3

MONGOLIAN REPRODUCTIVE HEALTH SURVEY 1998

HUSBAND'S QUESTIONNAIRE

CLUSTER NUMBER ☐☐☐

AIMAG ☐☐

SOM ☐☐

BAG ☐☐

HOUSEHOLD NUMBER ☐☐☐

AREA* ☐

NAME AND LINE NUMBER OF MAN ☐☐

NAME AND LINE NUMBER OF WIFE ☐☐

*** AREA CODES :**

1. **ULAANBAATAR**
2. **AIMAG CENTER**
3. **SOM CENTER**
4. **REMOTE RURAL**

INTERVIEW VISIT

FIRST	SECOND	FINAL
DAY ☐☐	DAY ☐☐	DAY ☐☐
MONTH ☐☐	MONTH ☐☐	MONTH ☐☐
RESULTS ** ☐	RESULTS ** ☐	RESULTS ** ☐

TOTAL NUMBER OF VISITS ☐

**** RESULTS CODES**

1. **COMPLETED**
2. **NOT AT HOME**
3. **POSTPONED**
4. **REFUSED**
5. **PARTLY COMPLETED**
6. **INCAPACITATED**
7. **OTHER** _____ **(SPECIFY)**

INTERVIEWER'S NAME/CODE ☐☐

SUPERVISER 'S NAME/CODE ☐☐

FIELD EDITOR ☐☐

KEYED BY ☐☐

SECTION 1. RESPONDENT'S BACKGROUND

No.	Questions and Filters	Coding Categories	Skip to
100	**RECORD THE TIME**	**HOUR** ☐☐ **MINUTES** ☐☐	
101	In what month and year were you born ?	MONTH ☐☐ DON'T KNOW 98 YEAR 19☐☐ DON'T KNOW 98	
102	How old are you ? (AGE IN COMPLETED YEARS)	AGE ☐☐	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	YEARS ☐☐ ALWAYS 95 VISITOR 96 →	105
104	Just before you moved here, did you live in a city, in an aimag center, in a som, or in the countryside?	CITY 1 AIMAG CENTER 2 SOM CENTER 3 COUNTRYSIDE 4	
105	Have you ever attended school ?	YES 1 NO 2 →	107
106	What was the highest level of school you completed ?	GRADE 1-3 1 GRADE 4-8 2 GRADE 9-10 3 PROFESSIONAL SCHOOL 4 HIGHER 5 →	108A
107	Can you read and understand a letter or newspaper easily , with difficulty, or not at all ?	EASILY 1 WITH DIFFICULTY 2 NOT AT ALL 3 →	108B
108A	Do you usually read a newspaper at least once a week ?	YES 1 NO 2	
108B	Do you usually listen to the radio at least once a week ?	YES 1 NO 2	
108C	Do you usually watch TV at least once a week ?	YES 1 NO 2	

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No.	Questions and Filters	Coding Categories	Skip to
109	What is your religion ?	ATHEIST 1 BUDDHIST 2 MUSLIM 3 PROTESTANT/CHRISTIAN 4 OTHER 5 (SPECIFY)	
110	What is your occupation, that is, what kind of work do you mainly do ?	DESCRIBE: ____	
111	Have you done any work in the last 12 months?	YES 1 NO 2 →	113
112	In which sector of the economy do you work?	SELF EMPLOYMENT 1 PUBLIC SECTOR 2 PRIVATE SECTOR 3 NON-GOVERNMENTAL ORGANIZATION 4	
113	Do you smoke cigarettes ? IF YES : About how many cigarettes do you usually smoke a day?	DO NOT SMOKE 00 → NUMBER ☐☐ 96 OR MORE 96 DON'T KNOW 98	115
114	At what age did you start smoking ?	AGE ☐☐	
115	Do you drink alcoholic beverages ? If yes: How many days each week ?	NO 1 → 1-3 TIMES PER WEEK 2 4 AND ABOVE PER WEEK 3	200
116	At what age did you start ?	AGE ☐☐	

SECTION 2. REPRODUCTION

No.	Questions and Filters	Coding Categories	Skip to
200	Now I would like to ask about your children. I am interested only in the children that are biologically yours. Have you ever had children?	YES 1 NO 2 →	300
201	How many children did you ever have ?	NUMBER ☐☐	
202	In what month and year was your last child born ?	YEAR 19☐☐ MONTH ☐☐	
203	When your wife was expecting your last born child , did you want to have the child then, did you want to wait until later, or did you not want to have any (more) children at all ?	THEN 1 LATER 2 NOT AT ALL 3	

SECTION 3. CONTRACEPTION

300 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.

No.	Questions and Filters	Coding Categories	Skip to
301	Have you or your partner ever used anything or tried in any way to delay or avoid getting her pregnant?	YES 1 NO 2 →	306
302	Are you or your wife/partner doing something or using a method to delay or avoid a pregnancy ?	YES 1 NO 2 →	304
303	Which method are you using ?	PILL 01 IUD 02 INJECTIONS 03 IMPLANTS/NORPLANT 04 DIAPHRAGM /FOAM/JELLY 05 CONDOM 06 → FEMALE STERILIZATION 07 MALE STERILIZATION 08 PERIODIC ABSTINENCE 09 WITHDRAWAL 10 OTHER 96 **(SPECIFY)**	308
304	What is the main reason you are not using a method of contraception to avoid pregnancy ?	**FERTILITY- RELATED REASONS** NOT HAVING SEX 21 INFREQUENT SEX 22 WIFE MENOPAUSAL/HYSTERECTOMY 23 WIFE SUBFECUND/INFECUND 24 POSTPARTUM/BREASTFEEDING 25 WANTS (MORE) CHILDREN 26 WIFE PREGNANT 27 **OPPOSITION TO USE** RESPONDENT OPPOSED 31 WIFE OPPOSED 32 OTHERS OPPOSED 33 RELIGIOUS PROHIBITION 34 **LACK OF KHOWLEDGE** KNOWS NO METHOD 41 KNOWS NO SOURCE 42 **METHOD -RELATED REASONS** HEALTH CONCERNS 51 FEAR OF SIDE EFFECTS 52 LACK OF ACCESS/TOO FAR 53 COST TOO MUCH 54 INCONVENIENT TO USE 55 REDUCES SEXUAL PLEASURE 56 UP TO THE WOMAN TO USE 61 OTHER 96 **(SPECIFY)** DON' T KNOW 98	
305	Do you think you will use method to delay or avoid pregnancy within the next 12 months ?	YES 1 → NO 2 DON'T KNOW 8	307

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	Skip to
306	Do you think you will use a method at any time in the future?	YES 1 NO 2 DON'T KNOW 8 →	308
307	Which method would you prefer to use ?	PILL O1 IUD O2 INJECTIONS O3 IMPLANTS/NORPLANT O4 DIAPHRAGM /FOAM/JELLY O5 CONDOM O6 FEMALE STERILIZATION O7 MALE STERILIZATION O8 PERIODIC ABSTINENCE O9 WITHDRAWAL 1O OTHER 96 (SPECIFY) UNSURE 98	
308	CHECK: Q 201 Has children ☐ → If you could go back to the time when you had no children and could choose exactly the um-beer of children to have in your whole life, how many would that be? No children ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be?	NUMBER OF CHILDREN ☐☐ OTHER	
309	Would you say that you approve or disapprove of couples using a method to avoid pregnancy ?	APPROVE 1 DISAPPROVE 2 DON'T KNOW 8	
310	In the last month, have you heard or seen a message about family planning on: the radio? the television? newspaper or magazine? a poster or billboard?	YES NO THE RADIO? 1 2 THE TELEVISION? 1 2 NEWSPAPER OR MAGAZINE? 1 2 A POSTER OR BILLBOARD? 1 2	
311	In the last few months have you discussed family planning with your friends, neighbors, or relatives?	YES 1 NO 2 →	313
312	With whom did you discuss ? With anyone else?	WIFE/PARTNER A PARENT B SISTERS/BROTHERS C DAUGHTER D MOTHER - IN - LAW E NEIGHBORS F OTHER X (SPECIFY)	

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	Skip to
313	Now I would like to ask your wife's/partner's attitude about family planning. Do you think that your wife'/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES 1 DISAPPROVES 2 DON'T KNOW 8	
314	Have you and your wife/partner ever discussed the number of children you would like to have? (IF YES :) How often ?	NEVER DISCUSSED 1 ONE OR TWO TIMES 2 OFTEN 3	
315	Do you think that your wife/partner wants the same number of children that you want , or does she want more or fewer than you want?	SAME NUMBER 1 MORE CHILDREN 2 FEWER CHILDREN 3 DON'T KNOW 8	
316	Women can have an operation to avoid having any more children. This is called sterilization . Have you ever heard of this?	YES 1 NO 2 →	319
317	Do you approve of a woman having a sterilization operation, or do you disapprove, or doesn't it matter to you?	APPROVE 1 →	319
		DISAPPROVE 2	
		DOESN'T MATTER 3 →	319
318	Why do you disapprove?	WANTS CHILDREN 01 RELIGIOUS REASONS 02 NOT NATURAL (NORMAL) 03 NOT HEALTHY 04 FEAR OF SIDE EFFECTS 05 COSTS TOO MUCH 06 PARTNER DISAPPROVES 07 REDUCES SEXUAL DRIVE 08 OTHER 96 (SPECIFY) DON'T KNOW 98	
319	Men can also have an operation to avoid getting women pregnant. This is called vasectomy. Have you ever heard of this?	YES 1 NO 2 →	400
320	Do you approve of a men having a vasectomy, or do you disapprove, or doesn't it matter to you?	APPROVE 1 →	400
		DISAPPROVE 2	
		DOESN'T MATTER 3 →	400
321	Why do you disapprove?	WANTS CHILDREN 01 RELIGIOUS REASONS 02 NOT NATURAL (NORMAL) 03 NOT HEALTHY 04 FEAR OF SIDE EFFECTS 05 COSTS TOO MUCH 06 PARTNER DISAPPROVES 07 REDUCES SEXUAL DRIVE 08 CASTRATION COMPLEX 09 OTHER 96 (SPECIFY) DON'T KNOW 98	

SECTION 4. AIDS

No.	Questions and Filters	Coding Categories	Skip to
400	Have you ever heard of an illness called AIDS ?	YES 1 NO 2 →	408
401	From which sources of information have you learned most about AIDS ? Any other sources ? RECORD ALL MENTIONED.	RADIO A TV B NEWSPAPERS/MAGAZINES C PAMPHLETS/POSTERS D HEALTH WORKERS E MOSQUES/CHURCHES F SCHOOLS/TEACHERS G COMMUNITY MEETINGS H FRIENDS/RELATIVES I WORK PLACE J OTHER X (SPECIFY)	
402	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS ?	YES 1 NO 2 DON'T KNOW 8 →	404
403	What can a person do ? Any other ways ? RECORD ALL MENTIONED.	ABSTAIN FROM SEX A USE CONDOMS B HAVE ONLY ONE SEX PARTNER C AVOID SEX WITH PROSTITUTES D AVOID SEX HOMOSEXUALS E AVOID BLOOD TRANSFUSIONS F AVOID INJECTIONS G AVOID KISSING H AVOID MOSQUITO BITES I SEEK PROTECTION FROM TRADITIONAL HEALER J OTHER X (SPECIFY) DON'T KNOW Z	
404	Is it possible for a healthy-looking person to have the AIDS virus ?	YES 1 NO 2 DON'T KNOW 8	
405	Do you think that persons with AIDS almost never die from the disease, sometimes die, or almost always die from the disease ?	ALMOST NEVER 1 SOMETIMES 2 ALMOST ALWAYS 3 DON'T KNOW 8	

No.	Questions and Filters	Coding Categories	Skip to
406	Do you think your chances of getting AIDS are small, moderate, great or no risk at all?	SMALL 1 MODERATE 2 GREAT 3 NO RISK AT ALL 4 DON'T KNOW 8	
407	Has your knowledge of AIDS influenced or changed your decisions about having sex or your sexual behavior ? IF YES, PROBE: In what way ? RECORD ALL MENTIONED.	STOPPED ALL SEX A START ED USING CONDOMS B RESTRICTED SEX TO ONE PARTNER C REDUCED NUMBER OF PARTNERS D OTHER X (SPECIFY) NO CHANGE IN SEXUAL BEHAVIOR Y DON'T KNOW Z	
408	**RECORD THE TIME**	**HOUR** ☐☐ **MINUTES**	

INTERVIEWER'S COMMENTS

EDITOR'S COMMENTS