MONGOLIA

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REPRODUCTIVE HEALTH SURVEY 2003

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OF MONGOLIA

and

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Reproductive Health Series

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FOREWORD

The second National Reproductive Health Survey was conducted in 2003 and its main report is now being made available to the public. The Survey has been executed by the National Statistical Office, with the MOH - the main client and user of the information – who actively collaborated by assigning its specialists for the Survey Steering Committee as well as for the Working Group of the survey.

UNFPA has fully funded the Survey, and provided technical assistance within the framework of its Third Country Programme of Assistance to Mongolia. More active participation by the national experts has been ensured at all stages of the Survey, while only certain areas, such as the questionnaire design, development of data processing program, the finalization of the draft Report, and the validation of indicators, have required international short-term assistance from the UNFPA Country Support Team in Bangkok.

The results of the Second Reproductive Health Survey are comparable with the data from the first survey conducted in 1998, as the information on fertility, infant mortality, family planning and mother and child health as well as knowledge and attitude towards STI/HIV/AIDS and abortion have been enriched by the results of this Survey. The survey has been undertaken based on experiences and lessons learnt from the first survey and with broad participation of health sector specialists, who are clients and main users a valuable contribution has been made to fostering closer collaboration between institutions and building national capacity.

The 2003 Survey collected additional information on family income and family planning methods and men's knowledge and attitude of family planning were studied on a broader scale than in the previous survey. Research institutions and specialized researchers can make in-depth study using a wide range of data collected during the survey.

The Survey results show that health services and their access have improved and the prevalence rate of family planning method utilization has hence demonstrating a progress in the implementation of the National Reproductive Health Programme. However, there are some issues requiring attention. For instance 70% of women are using contraceptives being offered free of charge and its use is likely to increase; abortion rate is high and despite people's awareness of the STI/HIV/AIDS and their prevention, actual use of prevention methods is limited.

We hope that the Report, published in both English and Mongolian, will be of valuable resource material for policy makers, health sector workers and researchers.

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The second National Reproductive Health Survey has been conducted within the framework of UNFPA funded project on "Improving the Accessibility and Availability of Population, Gender and Other Related Data" (MON/02/PO8).

The purpose of this survey was to collect and analyze the wealth of updated and enriched information on fertility, infant and child health and mortality, knowledge, attitude towards and practice of reproductive health including family planning and STI/HIV/AIDS. We hope that the results of the survey which offer reliable and detailed data set will have important implications for monitoring the implementation progress of the National Reproductive Health Programme and other public health policies and programmes.

It is our great pleasure to express our deep appreciation to Mr. Birat Simha, UNFPA Representative in Mongolia, for the financial and technical assistance for successful conduct of the Survey.

Our gratitude also goes to the management of Ministry of Health and central and local health sector and research organizations for their active collaboration during all stages of the Survey.

We wish to thank members of the Survey Steering Committee and the Working Group for their competent comments and inputs to have contributed to executing the RHS according to international standards and to making the results available to public. As well we would to thank Academician P.Nyamdavaa, Doctor and Professor and People's Doctor B.Jav and Leading Economist and Veteran Statistician R.Oidovdanzan for their assistance in comments and report writing of the survey.

Our sincere gratitude goes to UNFPA advisers Mr. Iqbal Alam, Mr. Aphichat Chamratritirong, Mr. Nuri Ozsever, and Mr. Tan Boon Ann for their valuable contributions and collaboration in designing the survey, development of data processing program, improving the draft report, and in validating the estimation of indicators. Certainly experience of closely working with international advisers has offered national experts a genuine opportunity to learn from their knowledge and skills.

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EXECUTIVE SUMMARY

Introduction

The 2003 Mongolian Reproductive Health Survey (RHS) has a nationally representative sample of 8399 households, in which 9314 women of reproductive age 15-49 years and a subsample of 4212 husbands were interviewed. Fieldwork was conducted from September to December 2003. 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 UNFPA Country Technical Services Team in Bangkok.

The main purpose of the RHS was to provide policy makers, programme managers, and related professionals of concerned departments and agencies in reproductive health and population with detailed information on fertility, infant and child mortality, family planning, and reproductive health, induced abortion, and STD/AIDS. The finding of RHS will help in the monitoring and evaluation of the implementation of the National Reproductive Health Program, that is the responsibilty of the Ministry of Health (MoH) 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 and level of education, among others. A further objective was to strengthen the capacity of NSO to carry out large-scale, nationally representative and internationally comparable surveys. Through a dissemination workshop and findings from the RHS report distributed and circulated, the concerned programme planners, health officials, agencies and researchers will use these information and indicators for informed policy-making, strategy development, program implementation and evaluation, and further research.

Fertility

Survey results indicates a total fertility rate (TFR) of 2.5 children per woman in 2001-2003 and this has declined from 3.1 children per woman in RHS 1998. The current TFR (2.5) is a slightly higher that the estimate of MoH (2.1), but close to the indirect estimate using MORTPAK software (2.49). Fertility levels differ for various population groups. The TFR for women living in urban areas (2.1 children per woman) is lower than for women living in rural areas (2.9 children per woman). Among regions, the TFR is lowest in Ulaanbaatar (1.9 children per woman) and the highest in the South Region (3.0), and medium in the Central, East and West Regions (between 2.6 and 2.9). The TFR declines with rising educational level of women, from 3.2 children per woman among mothers with low education to 2.4 among mothers with better education.

TFR is found high for women who are with no income or low income, like correlated with education level, the TFR falls with increasing income level.

The declining fertility trend can be deduced by comparing the completed family size (children ever born of women age 45-49) with the current TFR: completed family size is 5.0 children, 2.5 children more than the current TFR of 2.5.

The median age at first birth has increased slightly from 21.6 in 1998 RHS to 22.1 in 2003 RHS, an increase of 0.5 points. As with other fertility indicators, median age at first birth increases with rising educated level of women, for both 1998 and 2003 RHS.

There is a trend of declining fertility in almost all population subgroups at various tempo. With favorable proximate determinants such as prolonged breastfeeding, delaying age at marriages, preferences for small family size, and increased use of modern contraception and induced abortion, will influence the dynamics of fertility behavior and lead to a more rapid declining trend of fertility.

Family Planning

Knowledge of contraceptive methods is virtually universal among Mongolian women, with 99 percent of them knowing at least one modern methods.

About 92 percent of married women have ever used a method of contraception, and 69 percent were currently using at the time of the survey. Over 58 percent of married women were using a modern method of contraception, while 11 percent were using traditional methods. The IUD is by far the most commonly used method (33 percent), followed by pills (11 percent) and periodic abstinence (10 percent). Other modern methods of contraception account for small amounts of use among currently married women: injections and condoms (6 percent and 5 percent, respectively), and female sterilization (3 percent).

The findings show that the level of modern contraceptive use varies among population groups. The current use of modern contraception is highest in rural areas (62 percent) [instead of urban areas as in 1998], among women with “incomplete and complete secondary education” (59 percent and 63 percent, respectively), and among mothers of parity 2 and above (over 57 percent). About 72 percent of women using modern contraceptive methods obtained them free of charge. Such high prevalence of use among these various population sub-groups will have an impact on fertility and reproductive health.

Thus, difference in knowledge and use of contraceptives across age groups, regions, and educational levels requires that information on family planning and reproductive health services are to be delivered cost-effectively and efficiently, in a timely manner and based on the needs of local target groups.

It looks likely that contraceptive use will increase in the future. This is due partly to high increased approval from wives (96 percent), husbands (90 percent) and married couples (jointly 87 percent) as well as more than half of married women (51 percent) who are not currently using contraception intend to use contraception in the future.

Other Proximate Determinants of Fertility

The median age at marriage of women is relatively young: about 21.6 years. The median age at marriage has increased slightly for all women of reproductive age, as compared with the results of RHS 1998. The median age at first sexual intercourse has remained around 20.0 years between the oldest age group (45-49) and the youngest (25-29).

The duration of postpartum amenorrhea seems to be rather lengthy (median of 6.5 months and mean of 10.0 months), due in part to extended breastfeeding. The median duration of postpartum insusceptibility is 7.5 months. It is higher among mothers aged under 30, mothers in the West Region, and mothers with complete secondary education.

Fertility Preferences

Majority of married women (63 percent) indicated that they want no more children. The proportion of married women who desire no more children increases with age, rising from 41 percent of these women aged 25-29 to 64 percent of them aged 30-34. It is clear that many women have the preference to stop childbearing at relatively young ages.

More women desire to limit their family size. Among women with 2 survived children, 65 percent indicated that they want no more and among those with 3 survived children, 85 percent want no more.

Among recent births, 88 percent are reported to be wanted births, and 8 percent as unwanted births. If unwanted births could be avoided, the TFR would be 2.3 instead of current TFR of 2.5.

Overall, Reproductive Health programme in Mongolia has been successful in achieving high level of current use of modern contraceptive methods, high percentage of total demand for family planing satisfied and reduction of unwanted births.

Infant and Child Mortality

In the three years preceding the survey (2001 to 2003), infant mortality rate is estimated at 30 per 1000 births, while neonatal and postneonatal mortality rates are 14 per 1000 and 16 per 1000, respectively. For the same period, under-five mortality rate is estimated at 35 per 1000, while child mortality (age 1-4 years) is much lower at 5 per 1000. These direct estimates are quite close to the indirect estimates (using MORTPAK), which are 34 per 1000 for infant mortality ($_1q_0$) and 8 per 1000 for child mortality ($_4q_1$), for the year 2002. The infant mortality rate is also close to that of Ministry of Health (28 per 1000).

Infant mortality is higher in rural areas (32 per 1000) than in urban areas (26 per 1000). This may probably due to long distances to health facilities as well as lack of access to antenatal and delivery care, including emergency services in rural areas.

In general, child mortality (neonatal, infant, and under-five mortality) rates are relatively high in the West, East and Central Regions and low in the South Region and Ulaanbaatar. As in other countries, mother's educational level is inversely associated with neonatal, infant and under-five mortality and the child mortality rates are higher for male children than female children.

Upon examination of neonatal, infant and child mortality rates by per capita monthly average income, the mortality rate is very low for households with an income of 42501 MNT(13 deaths per 1000 births) per month per capita whereas it is as much as three times higher for household with no income or income of 8500. There was no mortality rate in the ages of 12-4 years for households with an income of 42501MNT per capita per month. But for households with no income or income of 8500, the indicators was high(8 deaths per 1000 births) which duly requires the attention.

Hence, to reduce infant and child mortality further, health programme, particularly RH programme, needs to be further strengthened to provide quality reproductive health care and services, particularly among the less educated women, adolescent women, women in rural areas and the less developed regions.

Reproductive and Child Health

Mongolia has a fairly well-developed primary health-care system with extensive facilities to provide reproductive and child care services.

The proportion of pregnant women seeking ANC, has increased from 96 percent in 1998 to 99 percent in 2003. Similarly, ANC provided by specialist genecologists has also increased from 48 percent in 1998 to 53 percent in 2003. At the same time, the median for the first antenatal visits has reduced from 3.7 months in 1998 to 3.3 months in 2003. These survey findings indicate that, overall, the ANC and delivery services, which are an important part of the primary health-care system, appear to be functioning adequately.

Percentage of deliveries at health facilities has increased from 94 percent in 1998 to 97 percent in 2003. Correspondingly the proportion of births delivered by health professionals has also increased from 94 percent in 1998 to 97 percent in 2003.

Survey shows that iron deficiency anemia is very common among reproductive age women; therefore, its prevention and treatment need urgent attention from Health Authorities and related agencies.

The prevalence of diarrhea in the 2 weeks period preceding the survey has increased from 9 percent in 1998 RHS to 13 percent in 2003 RHS

The prevalence of diseases associated with pregnancies such as heart, urinary tract, kidney and liver disarders has substantially increased from the 1998 level, which should be addressed accordingly.

High proportion of women who received post-partum counseling on breastfeeding and ANC may have contributed significantly to the improvement in the child health and reduction of infant and child mortality.

Breastfeeding

More than three fourths of children (78 percent) are breastfed within 30 minutes after births. The proportion of children who were breastfed for at least some time has increased from 97 percent in 1998 to 99 percent in 2003.

Over half (60 percent) of most recent births to mothers, who had obtained postpartum advice counseling from a doctor, receives counseling specifically on breastfeeding, which may have contributed to the increased and sustained duration of breastfeeding.

Breastfeeding practices in Mongolia deserve high commendation as large proportion of children receive breastmilk from mothers for an extended and sustained period and receive proper food supplementation at early age. This may most probably lower infant and child mortality, particularly the neonatal mortality.

The median duration of any breastfeeding has increased slightly from 25.2 months in 1998 to 25.9 months in 2003, while median duration for exclusive breastfeeding has increased from 3.5 months to 5.9 months over the same period. Interestingly, 94 percent of children aged 0-3 months and 85 percent of children aged 0-6 months were exclusively breastfed, suggesting an excellent compliance with the WHO recommendations.

Knowledge and Attitudes Concerning STIs and HIV/AIDS

The vast majority (95 percent) of Mongolian women have heard of STDs, 96 percent heard of HIV/AIDS and in most cases, they obtain information from TV, radio and newspaper. The mean number of source of information is 2.5 for STDs and 2.6 for HIV/AIDS. According to 95 percent of all women, STDs are preventable while 96 percent of women stated that one can avoid HIV/AIDS. The main methods for avoiding STDs and HIV/AIDS, as per them, are use of condom and having one sex partner. Therefore, one can conclude that Mongolian women know well about the means to protect themselves from STDs and HIV/AIDS, but the behavioral or practice level of using condom and having one sexual partner is extremely low.

The proportion of women who replied that HIV/AIDS was not preventable, which was 5.7 percent in the previous survey dropped to 4.1 in 2003, a decline by 1.6 points. Likewise, the percentage of women with misconception dropped from 4.6 percent in 1998 to 1.9 percent in 2003. These dynamics lead to the conclusion that knowledge of women about the means of HIV/AIDS prevention has improved over the last few years.

However, there are still many women who have misconception. For example, only slightly more than half of women think that a healthy looking person can transmit HIV infection. About 96-98 percent of women (25-39) in active sexual life did not change their sexual behaviour after they have received the information about

STDs and HIV/AIDS, and only less than one percent started to use condom. These changes of behavior depend on various factors such as attitudes of women towards STDs and HIV/AIDS prevention, sexual behaviour, their socio-economic situation and information, education, communication of these issues, and condom promotion and marketing. Thus further in-depth research is needed to provide reliable information and analysis, and indicators for policy and programme development to address such emerging and important issues.

Induced Abortion

The great majority (78 percent) of pregnancies ended in a live birth, followed by induced abortion, still births and miscarriage(22 percent). The abortion ratio for the 3-year period prior to the survey is 214 abortions per 1000 live births.

Overall, 8 percent of women aged 15-49 have had at least one abortion. Among them, 79 percent have had one abortion and 21 percent two or more. The total abortion rate (TAR), the number of abortions a women will have in her reproductive lifetime subjected to currently prevailing age-specific abortion rates, is 0.7 abortion per women. The urban TAR (0.9 abortion per women) is almost twice the rural TAR (0.4).

Among women who have had an abortion, 32 percent chose it because of beinf not ready to have a child in terms of time, 25 percent because of financial problems, 19 percent because of health concern and 17 percent because of increasing age with many children. Nearly all these women could have avoided the unwanted pregnancies by using effective contraception. Among these women, 28 percent had their last abortion in Ulaanbaatar, 36 percent in aimag hospitals, 26 percent in private hospitals and 9 percent in soum hospitals.

About 64 percent of these women had pre-abortion counselling and 79 percent had post-abortion counselling. Over half of these women were using contraceptives before abortion, and this has increased to 85 percent after abortion. Before abortion, sizeable proportion (37 percent) of these women were using periodic abstinence, 30 percent were taking pills and 12 percent were using condom. Contraceptive failure due to incorrect or imappropriate use of temporary methods such as pills and condoms and relying on ineffective traditional methods, will probably lead to a high abortion rate in Mongolia. Thus, there is a need to increase of modern contraceptive use among all women including those who have had abortions so that unwanted pregnancy and induced adortion is reduced.

Adolescent Reproductive Health

During the 5-year period between RHS 1998 and RHS 2003, the proportion of adolescents started childbearing has declined from 9 percent in 1998 to 7 percent in 2003. However, in 2003, this statistic is higher in rural areas (12 percent) than in urban areas (5 percent) by 2.5 times.

It is promising that 91 percent of all adolescents and 100 percent of married adolescents responded that they know at least one modern contraceptive method. The

mean number of methods known by all adolescents is 4.6 and 5.5 for married adolescents.

Among all adolescents, 4 percent are currently using a modern contraceptive method, while among married adolescents, 27 percent are currently using a modern method. Interestingly, the use of contraception, including the use of modern methods, decreases when the educational level of adolescents increases.

Among adolescents, 16 percent reported having had sexual intercourse(14-19 years), and the proportion of rural adolescents (18 percent) who had intercourse, is higher than that in urban areas (15 percent) by 3 points. Among adolescents who had sexual intercourse the month before the survey, 22 percent used condoms to protect from HIV/STDs: 37 percent from unmarried adolescents and 11 percent from married adolescents. Higher proportion of adolescents in urban areas (35 percent) use condom to avoid HIV/STDs than that in rural areas (9 percent).

Surprisingly, the percentage of adolescents who heard of AIDS has declined from 92 percent in 1998 to 90 percent in 2003. Among adolescents who know of AIDS, the percentage who responded that AIDS cannot be prevented and who had misinformation has reduced by 2 points (from 7 percent in 1998 to 5 percent in 2003) and 3 points (from 5 percent in 1998 to 2 percent in 2003) respectively. In other words, their knowledge on this matter has increased slightly. Moreover, 91 percent of respondents think that STDs are preventable, and in case of infection, they will see a doctor or other medical professional.

AIDS	acquired immunodeficiency syndrome
ANC	Antenatal (Prenatal) Care
ARI	acute respiratory infection
CBR	crude birth rate
CDR	crude death rate
CEB	children even born
FGP	family general practitioner
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
MOH	Ministry of Health
NN	neonatal mortality
NSO	National Statistical Office
ORS	Oral Re-hydration Saline
PNN	postneonatal mortality
PSU	primary sampling unit
RHS	Reproductive Health Survey
STIs	sexually transmitted infection
TFR	total fertility rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNSD	United Nations Statistics Devision
WHO	World Health Organization

CHAPTER I

INTRODUCTION

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Geography, Climate and History

Mongolia is situated in the center of Asia, occupying 1,566,460 square kilometers, a territory equal to 1.2 percent of the land surface of the world. It borders with the Russian Federation to the north and the People's Republic of China to the south. 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 region. 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).

Administratively, the country is divided into aimags and the capital; aimags are further divided into soums, soums into bags, while the capital city is divided into districts and districts into khoroos. Currently, the country has 21 aimags (provinces), 336 soums, 1674 bags and khoroos. The capital city is Ulaanbaatar (Figure 1.1).

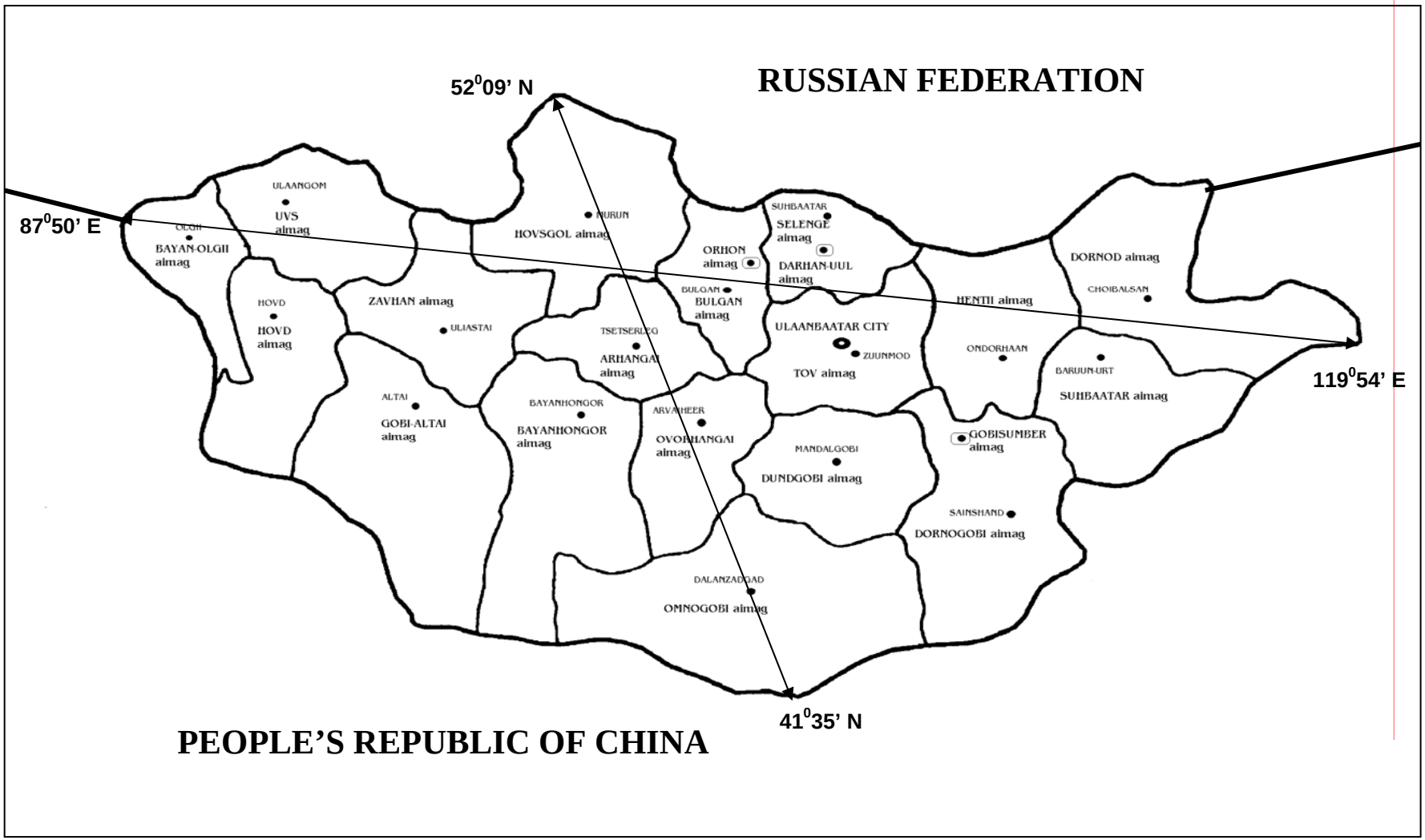
The original territory inhabited by Mongols is one of the ancient homes of humans. According the lastest research findings, Mongolia has been continuously inhabited for 800, 000 years.

The ancient Mongolian people established the first nomadic state in Asia over 2000 years ago. In 1206 Chingis Khan formed the Great Mongolian State of steppe nomads. His vast Mongolian Empire stretched across Asia and Europe. The Empire of Chingis Khan marked a pivotal historical era not only for Mongolia, but also in the historical framework of the world. This period is referred to as the Period of Mongolia. The 14th century saw an increasing inter-conflict among Mongols which resulted in the collapse the Mongolian Empire. In 1691, Mongolia lost its sovereignty and became part of Manchu remained under its rule for more than 200 years. However, with continuous fight for its independence and freedom, Mongolia was established as an autonomous country in 1921. This historical event followed by People's Revolution in 1921 and Mongolia's proclamation of a socialist way of development in 1924. With the transition to democracy and a market economy in 1990, Mongolia joined the common global path of development thus opening a new page in its history toward economic progress.

According to 2000 Population and Housing Census , the country's population is 2373.5 thousand of which 95.7 percent are Mongols, 4.3 percent are Kazakhs people. The Kazakhs live in western part of the country. There are a limited number of Chinese and Russian nationals, most of whom live in the capital city.

The official state language is Mongolian, and Mongolia has had one of the ancient civilizations of Asia with its own unique script and culture.

Figure 1.1 Administrative Units of Mongolia



Buddhism is a predominant religion of the Mongolian people. However, Kazakh populations in Western Mongolia practice Islam. In recent years, other religions have been introduced into Mongolia.

Population Growth

The Mongolian population was in stagnation until the middle of the 20th century. The preemptive cause of this stagnation was the weak social and economic development of the country prior to the World War 2. It should be noted, however, that the population of Mongolia grew as much as 3.7 times. The population growth of Mongolia can be divided into three stages: First, the slow growth or stagnation period from 1900 to 1950; Second, the rapid population growth from 1950 to mid-1980s. Third, the decline in population growth from the mid-1980s to the present. According to the census of 1918, the population of Mongolia was 647.5 thousand. and reached 845.5 thousand in 1956. This increase indicates an annual average growth rate of less than 1.0 percent. Since the 1940s, positive economic changes and continued political stability have contributed to the improvement of living conditions and have paved the way for the establishment of a more modern health care system. As a result, fertility has increased and mortality has decreased, leading to an annual average growth rate of 1.0 to 2.9 percent between 1956 and the mid 1980s.

Table 1.01 Some Selected Indicators of the Mongolian Population, 1979, 1989, 2000, 2003

Indicators	1979	1989	2000	2003
Total Population (* 1000)	1,595	2,044	2,374	2,504
Male (%)	50,1	49,9	49,6	49.6
Female (%)	49,9	50,1	50,4	50.4
Aged 0 – 4 (%)	16,5	15,9	10,4	9,2
Aged 5 – 14 (%)	27,7	26,0	25,4	23,4
Aged 15 – 64 (%)	50,8	54,1	60,8	63,8
Aged 65 + (%)	5,0	4,0	3,5	3,5
Female Aged 15 - 49 (%)	21,2	23,5	27,2	28,3
Sex Ratio (%)	100,3	99,7	98,5	98,4
Age Dependency Ratio (%)	96,9	84,8	64,6	61,6
Population Growth Rate (%)	2,9 [1970-1980]	2,5 [1980-1990]	1,4 [1990-2000]	1,3 [2000-2003]

From 1918 to 1969, the size of Mongolia's population doubled and between 1969 and 1989, it ion doubled again. However, since mid-1980s, fertility has gradually declined.

The main cause for slowering of the population growth is a decline in fertility. In 1990 there were 35.3 births per 1,000 population whereas this indicator dropped to 20.6 births per 1000 population. Mortality has substantially declined over the last 30 years. Crude death rate or number of deaths per 1,000 population was 6.6 in 2003, down from 8.5 in 1990 and 12.3 in 1970.

At of the end of 2003, the population of Mongolia was 2 million 504 thousand. This is an increase by 1.2 percent or 33 thousand since 2002. 49.6 percent of the total population is men and 50.4 percent is women. The population of Mongolia is relatively young and the percent of working age people is high.

Population Distribution and Migration

Mongolia is a country with a very sparse population unlike most countries in the world. There are 1.6 persons per one square kilometer.. Since the beginning of the 1990s, there has been an influx of people migrating from the countryside to more urbanized areas. This migration has resulted in a more noticeable discrepancy in population density numbers for aimags and soums. There are 161.7 persons per square kilometer in Ulaanbaatar, 25.4 persons/square km in Darkhan, 85.1 persons/square km in Orkhon, 0.3 persons /square km in Umnugovi, 0.5 persons/square km in Dornogobi, 0.5 persons/square km in Gobi-Altai, and 0.6 persons/ square km in Dornod aimag. According to the 2000 Population and Housing Census, 3.3 percent of the total population or 78,953 persons participated in migration in the previous year. In the past five years, migrants account for 7.6 percent of the population. Rural to urban migration has not slowed down over the last ten years, which may be related to the lack of consistent policy regarding internal migration.

Population Policy

As a country aiming for a civil democratic society, Mongolia has been committed to declarations and resolutions of the international community and the United Nations concerning issues of population and development. One of the demonstrations is the approval of the Population Policy of Mongolia of 1996 in order to implement the resolutions of the International Conference on Population and Development held in Cairo in 1994, and to adjust them to the country specific conditions.

Thanks to concerted efforts of the Government and local administrative organizations, much has been achieved in creating a legal environment for population growth, improving health, education, food and housing services, employment, developing social groups and strengthening the registration and data.

In order to address the challenges caused by the decline in population growth, and to ensure the consistency with the strategic documents at the international level, the Population Policy was replaced by the newly developed Population Development Policy of Mongolia, approved in May 2004 by the Parliament.

This policy will be implemented until 2015 in line with the development objectives of Mongolia and the Millennium Development goals in the following stages:

First stage: 2004-2007
Second stage: 2008-2011
Third stage: 2012-2015

Policy Objective:

The objective of the Population Development Policy is to sustain growth of population, and to create an environment for the population to enjoy prolonged, healthy and productive life, and development.

The development policy on the population fertility sets forth the following objectives in the framework of population reproductive health:

1. A favoirable condition will be created to facilitate harmonious growth and mental development, the fullest extent the health and wellbeing of all children. The birth of women of 20-39 years with 2-3 years spacing will be particularly promoted.
2. Access and quality of reproductive health services and care will be improved. Support will be given to women at risk of matermal mortality, as well as adolescents and elder women to regulate their pregnancy and births as per their choice.
3. Comprehensive measures will be implemented to reduce unwanted pregnancy, abortions and associated complications.
4. The quality and access of health and social protection services necessary for antenatal and postnatal care as well as for child-bearing and the child allowances will be increased.
5. Couples will be encouraged and supported to have three and more children and grow them healthy, and will be supported to increase their household income.
6. A supportive environment will be created to enforce human rights including reproductive rights by improving reproductive health public awareness, knowledge base, roles and responsibilities.
7. Community based services will be developed for prevention, care and rehabilitation of HIV/AIDS as well as other sexually transmitted diseases among men and women of reproductive age
8. Job places will be kept for mothers who delivered babies and child care allowances will be gradually increased up to their monthly salary level.

Second Population and Reproductive Health Survey (RHS)

This survey was conducted by the National Statistical Office (NSO) in 2003 for the second time, with the financial support of United Nations Population Fund(UNFPA). The development of the sample design, development of questionnaire, data gathering, data analysis, and report writing were jointly completed by experts of Population and Social Statistics Division of the NSO and the UNFPA MON/02/P08 project staff. The RHS is a comprehensive survey involving several organizations and many individuals. The NSO played the main role and the Ministry of Health (MOH) worked on the survey Steering Committee and Working Groups, in addition to being the main user.

The UNFPA Country Support Team in Bangkok provided advice on data entry, processing and development of tables, report writing and assessing the reliability of data.

The RHS has the following objectives:

- Gather information on fertility and family planning;
- Determine knowledge and use of contraceptive methods by region;
- Determine knowledge of family planning by age and other background characteristics;
- Gather information on specific health issues, including child immunization, breastfeeding practices, prenatal and postnatal care;
- Prepare baseline information required for tracking changes in family planning, health situation, fertility and mortality levels;
- Enrich the database on reproductive health and use of family planning within the country and internationally, and provide conclusions and recommendations;
- Provide policy makers, researchers and other users with necessary data.

Sampling for the RHS

The survey was conducted using a two-stage sampling method, which gives an equal probability of selection of households. This means that the data are fully comparable with the RHS 1998. The sample frame comprised the listings of households prepared annually in bags and khoroo across the country. Activities designed for improving the quality of data of the sample frame were conducted in the fourth quarter of 2002 and the first quarter of 2003. The actual sampling was based on the 2003 first half-year data. Table 1.02 shows the sampling.

It was determined from the experience of RHS 1998, and of other countries which have conducted similar surveys, that 25-30 households per cluster would provide an optimum representation. Therefore, this time 30 households were selected for a cluster (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 8,400 households, which is a 1.47 percent sample of all households in the country. This implied the selection of 280 clusters of households. Baghs and horoos were the primary sampling units (PSUs). All 1,674 PSUs were stratified implicitly by aimag and soum, and the selection of the 280 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. 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. Three husbands out of five married women interviewed in each PSU were interviewed using the husband's interview schedule.

Table 1.02 Distribution of the RHS Household Sampling by Aimag, Mongolia 2003

	Aimag	Clusters	Number of Households
1	Arhangai	1-13	390
2	Bayan-Olgii	14-23	300
3	Bayanhongor	24-34	330
4	Bulgan	35-42	240
5	Gobi-Altai	43-50	240
6	Dornogobi	51-56	180
7	Dornod	57-64	240
8	Dundgobi	65-70	180
9	Zavhan	71-80	300
10	Ovorhangai	81-94	420
11	Omnogobi	95-100	180
12	Suhbaatar	101-107	210
13	Selenge	108-118	330
14	Tov	119-129	330
15	Uvs	130-139	300
16	Hovd	140-149	300
17	Hovsgol	150-164	450
18	Hentii	165-173	270
19	Darhan-Uul	174-182	270
20	Ulaanbaatar	183-269	2610
21	Orhon	270-279	300
22	Gobisumber	280	30
	Total		8400

Questionnaire

There were three questionnaires used in the RHS. For the development of women's questionnaire, the model 'B' of the Demographic and Health Surveys Program served as a base, with some adjustments that reflect Mongolia's specific needs. The contents of the three questionnaires are outlined briefly below (See Appendix D for the questionnaires):

1. Household Questionnaire:

- Relationship to the household head;
- Age;
- Sex;
- Educational level;
- Marital status.

These questions were asked from all household members nad people who slept in the household prior to the interview. The household questionnaire was developed in order to obtain general demographic information, information on household amenities and housing conditions, household income and expenditure, and as a tool for selecting women and husbands for individual interview.

2. Woman's Questionnaire:
   - Background questions, marital status;
   - Reproduction;
   - Maternal health, pregnancy, breastfeeding, child health, abortion, miscarriage and stillbirth in the last five years;
   - Knowledge, access to and use of contraceptive methods;
   - Fertility preferences;
   - Employment, and questions concerning the husband
   - Knowledge about STIs and AIDS.

3. Husband's Questionnaire:
   - Background questions;
   - Reproduction;
   - Knowledge, access to and use of contraceptive methods;
   - Knowledge about STIs and AIDS.

Schedule of Survey Activities of the RHS

The preparatory activities for conducting RHS were initiated in September 2002 and the data collection activities were planned to be carried out before the end of 2003.

Table 1.03 General Plan for Conducting the RHS

	Planned Activities	Started	Ended
1	Preparatory activities for the survey	01.09.02	01.09.03
2	Pilot survey	15.02.03	15.03.03
3	Data collection	04.09.03	26.12.03
4	Data entry and processing	20.10.03	01.03.04
5	Development and programming of output tables	01.12.03	01.04.04
6	Running and printing of output tables	01.03.04	15.06.04
7	Production of main report	15.03.04	15.08.04

Pilot surveys

First versions of the survey questionnaires were modified based on the comments and suggestions provided by relevant ministries and organizations, and were finalized with the approval of the RHS Working Group and Steering Committee. Then two pilot surveys were conducted, one in Bayankhongor aimag covering 90 households (160 women aged 15-49, 20 husbands) and the other in Ulaanbaatar covering 60 households (60 women aged 15-49) from 6 February to 27 March 2004. 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 bagh and horoo levels, to test the arrangement of the field work, to estimate the cost of fieldwork activities, and to test programming for data processing. Based on the results of the pilot surveys, the questionnaires were revised, adjusted, and finalized.

Data Collection

From 10 August to 1 September 2003, 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 and lastly Ulaanbaatar city. Data collection started on 4 September and terminated 26 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. A number of persons from aimag, city, soum, district, baghs or horoos (around 560 persons in cumulative number) provided great assistance and collaboration during the fieldwork operation.

Data Processing

The computer data entry work was initiated on 20 October 2003 and terminated 1 March 1999. The editing of the computer files was finished by the middle of April. The computer software package, "Integrated System for Survey Analysis" (ISSA), created by Macro International, Inc. was used in data entry and processing. During February 2004, output tables were produced over a period of 4 months. Activities such as data entry, quality control and production of output tables were accomplished by the national staff under the supervision and guidance of an adviser from the UNFPA Country Support Team in Bangkok. The main report of RHS was prepared jointly by the experts of the NSO, MOH, and the researchers working in agencies under the MOH.

Coverage of the Survey

In the RHS, 8,400 households were selected and 8,399 households were actually interviewed; 9382 women aged 15-49 were selected for individual interview and 9314 women were actually interviewed; and 4229 husbands were selected and 4212 husbands were interviewed. The number surveyed indicates that the survey coverage was remarkably substantial because the survey response rate might have been 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 related to ensuring healthy working conditions and security of interviewers. There were no reported accidents or injuries to fieldwork staff.

Table 1.04 Results of the Household and Individual Interviews (Women and Husbands), Mongolia 2003

	Residence		
	Urban	Rural	**Total**
Number of Dwellings Sampled	4350	4050	8400
Number of Households Interviewed	4349	4050	8399
Household Response Rate	**100.0**	**100.0**	**100.0**
Number of Eligible Women	5005	4377	9382
Number of Eligible Women Interviewed	4972	4342	9314
Eligible Woman Response Rate	**99.3**	**99.2**	**99.3**
Number of Husbands Selected	2134	2095	4229
Number of Husbands Interviewed	2121	2091	4212
Husband Response Rate	**99.4**	**99.8**	**99.6**

CHAPTER II

HOUSEHOLD AND RESPONDENT CHARACTERISTICS

Amarbal Avirmed and Tserenkhand Biderya

This chapter has two purposes: 1) to describe background characteristics of the sampled households and their living environment; and 2) to provide a brief description of selected background characteristics of Mongolian women of reproductive age. Information on the age and sex of household members, educational level, marital status and housing conditions was collected using the household questionnaire. In addition, the detailed woman's questionnaire provides information on general characteristics including women's education, marital status, employment and their participation in decision making on use of earnings. This will provide the background for the subsequent chapters, which include analysis on fertility, nuptiality, contraceptive behavior, reproductive, mother and child health, abortion knowledge.

Age-Sex Composition of the Population

The age and sex composition of a population reflects the change in fertility and mortality levels as well as migration patterns. Table 2.01 presents the percent distribution of the de-facto population by 5-year age group, according to residence and sex. 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 selected 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. The pyramid reflects that the population is relatively young (Figure 2.1). The percentage of population aged 0-4 compared to the percentage of age 5-9 decreased by 0.7 percent in urban areas while it increased by 0.6 percent in rural areas. The overall decrease is negligible. This negligible decrease demonstrates that the decrease in fertility is greater in urban areas than in rural areas and overall fertility seems to be stabilizing.

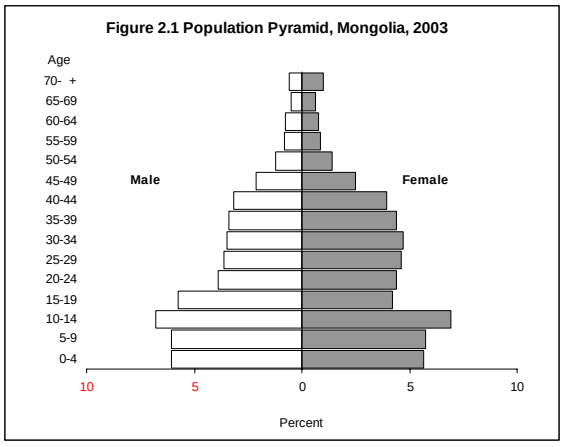
The age-sex composition of the population also provides important indicators such as the dependency ratio and the median age of the population. The dependency ratio is the quotient of the number of youths under 15 and the number of persons 65 and over divided by the number of adults aged 15 to 64 (the economically active ages), times 100. The dependency ratio has fallen from 102 in 1969 to 60 in 2003 over the course of the past 34 years. The principal causal factor is the substantial reduction of the proportion of youths under 15 and the increase of the economically active population (aged 15-64). Presently, people in the economically active age group constitute the condition of breadwinning the small population. The median age rose from 17.5 in 1979 to 22.4 in 2003 reflecting on the other hand the falling fertility rates.

Table 2.01 Percent Distribution of the Household Population by Five-Year Age Groups, According to Sex and Urban-Rural Residence, Mongolia 2003

Household Member Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	10.5	9.2	9.8	14.9	13.1	13.9	12.6	11.1	11.8
5-9	11.3	9.8	10.5	14.1	12.5	13.3	12.6	11.1	11.8
10-14	14.9	14.3	14.6	13.2	12.4	12.8	14.1	13.4	13.7
15-19	13.2	9.1	11.0	10.5	6.9	8.7	11.9	8.1	9.9
20-24	8.3	8.3	8.3	7.8	8.7	8.3	8.1	8.5	8.3
25-29	6.9	8.2	7.6	8.3	9.7	9.0	7.5	8.9	8.3
30-34	7.2	8.8	8.0	7.2	9.3	8.3	7.2	9.1	8.2
35-39	7.1	8.8	8.0	6.8	8.1	7.5	7.0	8.5	7.8
40-44	7.0	7.7	7.4	6.1	7.4	6.8	6.6	7.6	7.1
45-49	4.6	5.3	4.9	4.1	4.3	4.2	4.4	4.8	4.6
50-54	2.9	3.2	3.1	2.0	2.1	2.1	2.5	2.7	2.6
55-59	1.9	1.9	1.9	1.4	1.5	1.5	1.7	1.7	1.7
60-64	1.7	1.8	1.7	1.4	1.2	1.3	1.6	1.5	1.5
65-69	1.1	1.1	1.1	1.0	1.2	1.1	1.0	1.2	1.1
70-74	0.8	1.0	0.9	0.6	0.5	0.5	0.7	0.8	0.7
75-79	0.4	0.6	0.5	0.3	0.3	0.3	0.4	0.5	0.4
80 +	0.3	0.7	0.5	0.3	0.5	0.4	0.3	0.6	0.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	8112	8886	16998	7244	8007	15251	15356	16893	32249

Table 2.02 Percent Distribution of the Population by Age Group at Different Dates, Mongolia 2003

Background Characteristics	Census				Survey
	1969	1979	1989	2000	2003
Age Group					
Less than 15	44.4	44.2	41.9	33.4	34.9
15-64	49.6	50.8	54.1	63.0	62.6
65 +	6.0	5.0	4.0	3.6	2.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Median Age	18.6	17.5	18.4	21.6	22.4
Dependency Ratio	101.6	96.9	84.8	64.6	59.7



Household Composition

The 2003 Reproductive Health Survey (RHS) defines a "household" 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 displays the percent distribution of households by sex of head, size and by residence. The percentage of female-headed households is higher in urban areas than rural areas, 17 percent versus 10 percent. In both urban and rural areas, over 80 percent of households have 5 or fewer members, with a mean of 4.2 members in a household in both areas.

Table 2.03 Percent Distribution of Households by Sex of Head and Size, According to Urban-Rural Residence, Mongolia 2003

Background Characteristics	Residence		
	Urban	Rural	Total
Sex of Head of Household			
Male	82.7	90.4	86.4
Female	17.3	9.6	13.6
Total	**100.0**	**100.0**	**100.0**
Household Members			
1	2.1	1.6	1.8
2	8.6	9.2	8.9
3	21.4	22.6	22.0
4	31.0	30.0	30.5
5	19.4	18.6	19.0
6	9.7	10.5	10.1
7	3.9	4.4	4.2
8	2.1	2.0	2.0
9 +	1.8	1.0	1.4
Total	**100.0**	**100.0**	**100.0**
Mean	4.2	4.2	4.2

Educational Level

From a demographic standpoint, educational level (particularly women's educational levels) 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.

According to these tables, the educational level of females is higher than that of males. For example, over 44 percent of females have completed secondary school or more, while only 35 percent of males have done so. Conversely, when examining completion of primary school or less: 44 percent of males have completed primary school or less versus 39 percent of females having primary education or less [Table 2.04(A) and Table 2.04 (B)]. The percentage of women is higher compared to men

regarding educational level beyond the secondary school level in age groups between 20 and 54. At age 55 and over, a larger proportion of men, when compared to women, have a secondary education level and higher reflecting the relative disadvantage of women many years ago.

Table 2.04(A) Percent Distribution of the Male Household Population Age 6 and Over by Highest Level of Education Attended, According to Selected Background Chracteristics, Mongolia 2003

Background Characteristics	Level of Education						
	Primary or Less	Incomplete Secondary	Complete Secondary	More than Secondary	DK/ Missing	Total	Number
Household Member Age							
6-9	99.5	0.0	0.0	0.0	0.5	100.0	1,541
10-14	98.8	0.9	0.1	0.0	0.1	100.0	2,167
15-19	38.8	41.1	19.2	0.9	0.0	100.0	1,834
20-24	27.7	26.1	32.6	13.6	0.0	100.0	1,244
25-29	16.5	35.2	24.4	23.6	0.0	100.0	1,156
30-34	6.7	27.3	29.6	36.3	0.1	100.0	1,105
35-39	7.7	28.5	24.6	39.2	0.0	100.0	1,068
40-44	10.4	26.8	19.6	42.9	0.0	100.0	1,015
45-49	16.7	28.7	13.2	41.4	0.0	100.0	669
50-54	15.4	25.5	13.8	45.4	0.0	100.0	377
55-59	28.2	18.1	8.9	44.8	0.0	100.0	259
60-64	31.4	20.5	10.5	37.7	0.0	100.0	239
65 +	51.8	9.2	3.9	35.0	0.0	100.0	357
Residence							
Urban	35.3	18.3	20.5	25.7	0.1	100.0	7,094
Rural	53.6	25.3	9.8	11.3	0.0	100.0	5,937
Region							
Central	48.0	23.5	11.4	17.1	0.0	100.0	4,087
East	49.7	25.0	12.4	12.9	0.0	100.0	1,128
West	51.8	22.6	12.2	13.2	0.2	100.0	2,702
South	53.5	25.7	9.1	11.7	0.0	100.0	783
Ulaanbaatar	31.0	17.2	23.8	27.8	0.1	100.0	4,331
Total	**43.6**	**21.5**	**15.6**	**19.2**	**0.1**	**100.0**	**13,031**

Due to the socio-economic changes and possibly increasing rate of women being valued by parents that have occurred during the last years, the percentage of men with completed secondary and tertiary education was lower than that of women, and this was true in both urban and rural areas and in all regions.

Table 2.04(B) Percent Distribution of the Female Household Population Age 6 and Over by Highest Level of Education Attended, According to Selected Background Chracteristics, Mongolia 2003

Background Characteristics	Level of Education						
	Primary or less	Incomplete Secondary	Complete Secondary	More than Secondary	DK/ Missing	Total	Number
Household Member Age							
6-9	99.9	0.0	0.0	0.0	0.1	100.0	1,507
10-14	98.9	1.0	0.0	0.1	0.0	100.0	2,261
15-19	32.3	44.0	23.0	0.7	0.1	100.0	1,364
20-24	18.9	22.0	38.0	21.1	0.0	100.0	1,436
25-29	5.5	31.4	29.6	33.5	0.0	100.0	1,511
30-34	3.5	16.8	34.7	45.1	0.0	100.0	1,533
35-39	5.2	17.0	26.3	51.4	0.0	100.0	1,437
40-44	9.6	18.6	19.3	52.5	0.0	100.0	1,283
45-49	15.6	19.4	14.3	50.6	0.0	100.0	818
50-54	26.2	16.8	11.4	45.6	0.0	100.0	458
55-59	36.0	15.8	10.6	37.7	0.0	100.0	292
60-64	48.0	15.2	10.5	26.2	0.0	100.0	256
65 +	74.9	8.7	3.6	12.9	0.9	100.0	505
Residence							
Urban	32.4	13.4	21.4	32.8	0.0	100.0	7,919
Rural	45.6	21.7	15.1	17.6	0.0	100.0	6,742
Region							
Central	40.7	17.9	16.3	25.0	0.0	100.0	4,653
East	39.2	22.1	19.5	19.1	0.0	100.0	1,228
West	47.9	18.9	14.3	18.9	0.1	100.0	3,122
South	42.9	23.0	15.1	19.0	0.0	100.0	933
Ulaanbaatar	29.0	12.8	23.8	34.3	0.0	100.0	4,725
Total	**38.5**	**17.2**	**18.5**	**25.8**	**0.0**	**100.0**	**14,661**

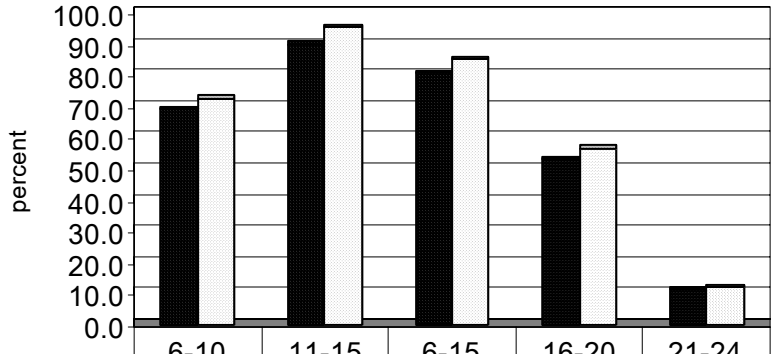
Table 2.05 Percentage of Household Population 6-24 Years of Age Attending School by Age, Sex and Residence, Mongolia 2003

Age Group	Male			Female			Total		
	Residence			Residence			Residence		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	77.7	60.2	68.9	78.3	67.1	72.6	78.0	63.7	70.7
11-15	96.0	81.9	89.8	98.7	90.5	95.2	97.3	86.1	92.5
6-15	**88.1**	**71.2**	**80.5**	**90.2**	**78.7**	**84.8**	**89.1**	**75.0**	**82.5**
16-20	69.4	30.3	52.9	74.3	30.3	56.5	71.6	30.3	54.5
21-24	19.5	1.3	11.3	21.4	2.5	12.0	20.5	2.0	11.7

Table 2.05 presents the status of school attendance of the population age 6-24 years. For the population in the age group of primary education, or age 6-10 years, the proportion of girls attending school (73 percent) was slightly higher than that of boys, but attendance in urban areas (78 percent) was substantially higher than in rural areas (64 percent). However, the percentage of girls aged 11-15 years attending school was higher than that of boys by 5 points (95 percent versus 90 percent). In 2003, one of every 9 persons aged 21-24 was attending school. This indicator was substantially higher in urban areas, over 1 in 5. This increase was directly related to the concentration of institutions of higher learning in urban areas. However, lower

attendance percentages for males when compared to females aged 11 years and over are of serious concern and require attention to correct such unhealthy disparity.

Figure 2.2 Percentage of Houshold Population 6-24 Years of Age Attending School by Age and Sex, Mongolia 2003



	6-10	11-15	6-15	16-20	21-24
■ Male	68.9	89.8	80.5	52.9	11.3
□ Female	72.6	95.2	84.8	56.5	12.0

Housing Conditions of Households and Related Characteristics

In the household questionnaire several questions were included in order to investigate housing conditions. The responses to the questions are presented in Table 2.06. The survey results reflect that 46 percent of households lived in traditional dwellings (gers), and more than half (54 percent) lived in apartments and houses. About 70 percent of rural households and 24 percent of urban households lived in gers, while 42 percent of urban households lived in apartments.

Overall, more than three quarters of households used electricity. Electricity was available in almost all of the urban households (98 percent), while over half (53 percent) of rural households used electricity. Almost 98 percent of urban households used central/piped, local, or well water, while 46 percent of rural households obtained their drinking water from springs, rivers, snow or rainwater, indicating a great disparity in the sources of drinking water by residence.

Regarding the question whether the household income was enough or not, about 55 percent of all households reported that their income was enough. A lower proportion of urban households which is 52 percent when compared with 58% of rural households reported that their income was sufficient.

Table 2.06 Percent Distribution of Households by Housing Characteristics, According to Urban-Rural Residence, Mongolia 2003

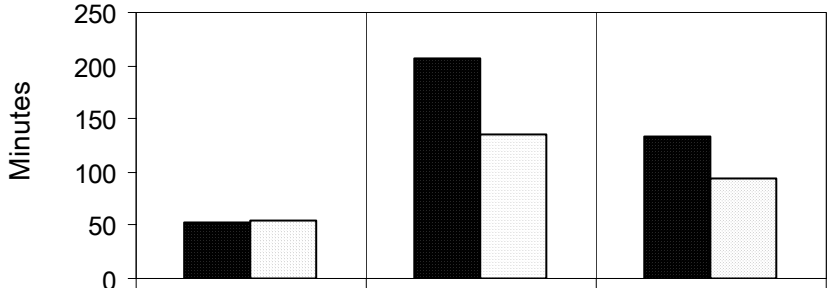
Background Characteristics	Residence		
	Urban	Rural	Total
Accommodation			
Ger (With 4 or 5 Walls)	20.8	54.2	36.9
Ger (With 6+ Walls)	3.6	15.7	9.5
Private House (1-2 Rooms)	28.2	21.9	25.1
Private House (3+ Rooms)	5.8	4.4	5.1
Apartment (1-2 Rooms)	28.9	2.9	16.4
Apartment (3+ Rooms)	12.6	0.9	6.9
Total	**99.9**	**99.9**	**99.9**
Electricity			
Yes	98.1	52.7	76.2
No	1.9	47.3	23.8
Total	**100.0**	**100.0**	**100.0**
Source of Drinking Water			
Central/Piped	42.4	3.6	23.7
Local	1.1	0.1	0.7
Well	54.3	50.4	52.4
Spring Water/Mineral Spring	0.5	10.0	5.1
River/Snow/Rainwater	1.7	35.9	18.2
Total	**100.0**	**100.0**	**100.0**
Household Income			
Enough	51.8	57.9	54.7
Not Enough	48.1	42.0	45.2
Don't Know	0.1	0.0	0.1
Total	**100.0**	**100.0**	**100.0**
Number	4,349	4,050	8,399

Table 2.07 Percent Distribution of Households According to the Fastest Way to Obtain Medical Emergency Services, and Mean Time in Minutes, Mongolia 2003

Background Characteristics	Residence		
	Urban	Rural	Total
The Fastest Way to Obtain Medical Emergency Services			
Phone	89.1	10.3	51.1
By Car/Motorcycle	0.8	25.2	12.6
By Horse/Camel/Cattle/Yak	1.0	29.3	14.6
Walking	8.9	34.9	21.4
DK/Missing	0.3	0.2	0.3
Total	**100.0**	**100.0**	**100.0**
Number	4,349	4,050	8,399
Number & Mean Time			
Responding Households	4,261	4,017	8,278
Mean Time in Minutes	54.1	136.2	93.9

In order to investigate medical service availability, questions about fastest ways and time taken to obtain medical emergency services were included in the questionnaire. There was a great difference in the availability of medical services by residence. This can be seen in Table 2.07. Slightly over 89 percent of urban households called medical emergency services by 'telephone', while same percentage (89 percent) of rural households obtained medical emergency services by 'car/motorcycle', 'horse/camel/cattle/yak' or 'walking'. Overall, the average time taken to obtain medical emergency services was slightly over 1.5 hours (93 minutes) and this was shorter than reported in the 1998 RHS (133 minutes). For details, see Table 2.08 and Figure 2.3.

Figure 2.3 Mean Time in Minutes to Obtain Medical Emergency Services by Urban-Rural Residence, Mongolia 1998, 2003



	Urban	Rural	Total
■ Mean Time in Minutes, 1998	52.9	206.8	132.9
□ Mean Time in Minutes, 2003	54.1	136.2	93.9

Respondent Characteristics

Table 2.08 presents the percent distribution of women respondents by age, marital status, urban-rural residence, region, level of education and school attendance. Out of the 9314 women interviewed in the survey, 25 percent were never married, 62 percent were married, 6 percent were living together, and 7 percent were widowed, divorced or separated.

Due to the diversity of density and residence of the population, the number of women selected in the survey was different for different regions. Between 20 and 33 percent of women lived in each of the Western and Central Regions and in Ulaanbaatar city, while only 9 percent live in the Eastern Region and 7 percent in Southern Region. The question related to whether being engaged in schooling was asked of women aged 15-49. About 12 percent of women responded positively and 12% of women of child bearing ages obtained a primary educational level or less. Almost 36 percent of these women had been educated beyond the secondary level, while 25 percent had an 'incomplete secondary' education and 28 percent had a 'complete secondary' education. The findings indicate that, in general, Mongolian women are well educated. Regarding religion, a high proportion (41 percent) of all women reported that they were 'Atheist', while more than a half (55 percent) of the

women reported that they were 'Buddhist'. This confirms that Buddhism is the most common religion in Mongolia.

Table 2.08 Percent Distribution of Women Respondents by Age, Marital Status, Urban-Rural Residence, Region, Level of Education, School Attendance and Religion, Mongolia 2003

Background Characteristics	Respondents (Women)	
	Percent	Number
Age in 5 Year Categories		
15-19	14.5	1,347
20-24	15.2	1,420
25-29	16.2	1,509
30-34	16.3	1,520
35-39	15.3	1,428
40-44	13.7	1,276
45-49	8.7	814
Current Marital Status		
Never Married	24.5	2,283
Married	62.3	5,803
Living Together	5.8	542
Widowed	3.3	311
Divorced	3.8	356
Separated	0.2	19
Residence		
Urban	53.4	4,973
Rural	46.6	4,341
Region		
Central	32.0	2,983
East	8.9	827
West	20.1	1,873
South	6.5	608
Ulaanbaatar	32.5	3,023
Highest Education Level		
Primary or Less	12.2	1,132
Incomplete Secondary	24.5	2,280
Complete Secondary	27.6	2,570
More than Secondary	35.8	3,332
Currently Attending School		
Yes	12.4	1,152
No	87.6	8,162
Religion		
Atheist	40.8	3,804
Buddhist	54.8	5,107
Muslim	2.1	196
Protestant/Christian	2.0	186
Other	0.2	21
Total	**100.0**	**9,314**

The educational level of women of reproductive age, by age group, residence and regions is shown in Table 2.09. According to the percentages, the youngest women appeared less educated than those women in their 20s and 30s because the youngest women had not yet completed their education. Women living in urban areas, and particularly those in Ulaanbaatar, had a higher level of education than other women. Nearly 45 percent of women in Ulaanbaatar studied beyond the secondary school level and the same level of educational attainment was also observed in urban areas. However, this was true of only 25 percent of women in rural areas, and 27 percent of women each in the Southern and the Central Regions.

Table 2.09 Percent Distribution of Women Respondents by Highest Level of Education Attained, According to Age, Residence, and Region, Mongolia 2003

Background Characteristics	Highest Educational Level					Number
	Primary or Less	Incomplete Secondary	Complete Secondary	More than Secondary	Total	
Age in 5 Year Categories						
15-19	32.0	44.2	23.2	0.6	100.0	1,347
20-24	18.4	22.0	38.1	21.5	100.0	1,420
25-29	5.3	31.7	29.6	33.5	100.0	1,509
30-34	3.3	16.6	35.0	45.1	100.0	1,520
35-39	4.6	17.0	26.5	52.0	100.0	1,428
40-44	9.4	18.8	19.0	52.7	100.0	1,276
45-49	15.4	19.4	14.4	50.9	100.0	814
Residence						
Urban	5.3	18.3	31.6	44.9	100.0	4,973
Rural	20.0	31.6	23.0	25.4	100.0	4,341
Region						
Central	14.1	25.8	24.8	35.3	100.0	2,983
East	14.3	30.5	28.4	26.8	100.0	827
West	19.0	29.3	23.1	28.7	100.0	1,873
South	17.1	33.1	22.5	27.3	100.0	608
Ulaanbaatar	4.4	16.8	33.9	44.8	100.0	3,023
Total	**12.2**	**24.5**	**27.6**	**35.8**	**100.0**	**9,314**

Exposure to the Mass Media

In order to determine the availability of and exposure to the major mass media (newspaper, television and radio), questions concerning these three main sources of mass media were included in the questionnaires for women and husbands.

Table 2.10 indicates that nearly 3 percent of women and 2 percent of husbands reported that they did not receive any information from the mass media in the past week. The survey shows that television appeared to be the most popular source of information in Mongolia (80 percent of women, 81 percent of husbands). The largest percentage exposed to television was observed among women in urban areas (98 percent) and in Ulaanbaatar (99 percent), and women with tertiary, vocational and technical education (98 percent). The second most popular form of mass media was radio (76 percent of women and 72 percent of husbands) and newspapers (75 percent

of women and 73 percent of husbands). The newspaper had similar differentials by residence, region and education as those of television. However, these types of differentials were less noticeable for radio, implying that the proportion women from different residence, regional and educational sub-groups had similar exposure to radio. Half of women (50 percent) and 46 percent of men reported exposure to one of these three mass media in the last week. This figure for women rose to 65 percent in urban areas and to 72 percent in Ulaanbaatar.

Table 2.10 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 2003

Background Characteristics	Mass Communication Media					
	No Mass Media	Reads Newspaper	Watches Television	Listens to Radio	All Three Media	Number of Respondents
Age in 5 Year Categories						
15-19	1.7	71.0	86.1	75.1	49.7	1,347
20-24	3.1	70.4	73.5	78.7	45.7	1,420
25-29	2.8	73.0	74.7	75.8	46.4	1,509
30-34	2.4	76.7	79.5	73.6	48.5	1,520
35-39	2.9	77.7	82.8	76.3	54.5	1,428
40-44	3.2	77.7	81.0	77.8	54.6	1,276
45-49	2.1	75.1	81.0	79.2	54.9	814
Residence						
Urban	0.8	82.3	97.7	76.6	65.3	4,973
Rural	4.7	65.5	58.9	76.3	33.0	4,341
Region						
Central	3.2	70.5	77.0	69.1	40.6	2,983
East	3.4	67.2	70.5	76.2	40.6	827
West	5.0	69.2	60.1	77.2	37.3	1,873
South	1.8	69.7	70.1	80.9	41.6	608
Ulaanbaatar	0.6	84.5	98.6	82.3	72.0	3,023
Highest Education Level						
Primary or Less	8.8	48.9	51.4	74.3	22.6	1,132
Incomplete Secondary	3.3	63.8	69.3	76.9	38.1	2,280
Complete Secondary	1.2	77.6	85.3	76.6	54.4	2,570
More than Secondary	1.2	88.0	91.9	76.7	64.7	3,332
All Women	**2.6**	**74.5**	**79.6**	**76.4**	**50.2**	**9,314**
Husbands	**1.5**	**73.1**	**81.0**	**72.1**	**46.0**	**4,212**

Employment

The current employment of women and their continuity of employment are displayed in Table 2.11. The table demonstrates that about one quarter (24 percent) of all women reported that they were not currently employed. This figure is slightly less than half of that reported in RHS 1998 (43 percent). This indicator was highest in urban areas (30 percent) and in Ulaanbaatar (30 percent), compared to only 17 percent in rural areas. Upon examination of educational differentials, the women least likely to be employed during the previous 12 months were those with completed secondary, tertiary, vocational and technical education, while those with either primary schooling or less, or incomplete secondary schooling were the most likely to be employed. This discrepancy may reflect that better educated women may have difficulty getting a job

that fits their education. Regarding current employment, half (50 percent) of all women, 38 percent of urban women and 63 percent of rural women were employed 5 or more days per week for the whole year. The percentage of women who were employed 5 or more days per week is higher for women with primary education (54 percent) and those with post secondary education (60 percent) than those from other educational groups.

Table 2.11 Percent Distribution of Women by Whether Currently Employed and by Continuity of Employment, According to Background Characteristics, Mongolia 2003

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	2.2	0.7	15.1	0.3	1.5	0.4	20.3	1,347
20-24	23.3	2.9	44.2	2.3	2.7	1.1	76.5	1,420
25-29	27.5	4.2	54.6	2.4	4.0	2.0	94.6	1,509
30-34	25.3	4.8	57.0	3.7	5.0	1.4	97.1	1,520
35-39	24.2	3.9	56.6	4.1	6.7	2.7	98.0	1,428
40-44	19.6	2.5	63.5	3.3	6.3	1.5	96.6	1,276
45-49	22.4	2.1	59.3	3.1	6.0	0.5	93.4	814
Residence								
Urban	25.8	4.4	37.6	3.4	3.8	1.8	76.7	4,973
Rural	15.1	1.7	63.4	2.0	5.3	1.0	88.5	4,341
Region								
Central	17.6	3.6	53.1	2.2	7.0	1.7	85.4	2,983
East	24.2	2.5	50.3	2.9	5.1	1.7	86.7	827
West	17.7	1.7	59.6	1.7	4.4	1.2	86.4	1,873
South	16.4	0.5	63.2	4.3	1.6	1.6	87.7	608
Ulaanbaatar	25.8	4.2	37.1	3.5	2.4	1.2	74.2	3,023
Highest Education Level								
Primary or Less	10.9	0.6	54.1	0.6	1.9	0.6	68.7	1,132
Incomplete Secondary	19.1	2.0	44.6	1.4	4.5	1.1	72.5	2,280
Complete Secondary	27.2	3.7	39.1	2.8	4.3	2.0	79.0	2,570
More than Secondary	20.4	4.3	59.7	4.4	5.6	1.5	95.8	3,332
Total	**20.8**	**3.1**	**49.6**	**2.7**	**4.5**	**1.4**	**82.2**	**9,314**

The proportion of women employed in public, private and non-governmental organizations increases with increasing level of education, rising from 15 percent among women with primary or less education to 70 percent among women with post secondary education. Conversely, the percentage of self-employed women declines as their educational level increases. For example, about 85 percent of women with primary or less education were self-employed, while 30 percent of women with post secondary education were self-employed.

Table 2.12 Percent Distribution of Employed Women by Employer and Whether Receives Cash Earnings, According to Background Characteristics, Mongolia 2003

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	72.1	6.0	3.4	0.0	17.2	1.3	100.0	233
20-24	60.1	1.5	10.8	0.0	27.0	0.6	100.0	715
25-29	51.9	1.7	21.7	0.0	24.4	0.3	100.0	950
30-34	51.6	1.3	26.6	0.1	20.2	0.2	100.0	1,019
35-39	44.9	0.4	35.4	0.1	19.0	0.1	100.0	999
40-44	42.4	0.4	39.6	0.0	17.5	0.1	100.0	951
45-49	38.1	1.8	44.4	0.0	15.5	0.2	100.0	561
Residence								
Urban	29.0	0.5	40.1	0.1	30.1	0.3	100.0	2,315
Rural	64.6	2.0	19.7	0.0	13.4	0.3	100.0	3,113
Region								
Central	60.1	2.7	24.2	0.0	12.8	0.3	100.0	1,913
East	57.1	1.0	24.6	0.0	16.5	0.8	100.0	496
West	48.7	1.0	27.0	0.1	23.0	0.2	100.0	1,254
South	66.3	0.0	27.9	0.0	5.6	0.2	100.0	430
Ulaanbaatar	26.5	0.2	37.4	0.1	35.7	0.1	100.0	1,335
Highest Education Level								
Primary or Less	81.5	3.2	2.2	0.0	12.5	0.6	100.0	648
Incomplete Secondary	69.1	2.2	10.5	0.0	18.0	0.3	100.0	1,174
Complete Secondary	51.0	1.5	20.4	0.2	26.7	0.3	100.0	1,237
More than Secondary	30.1	0.3	48.7	0.0	20.8	0.2	100.0	2,369
Total	**49.4**	**1.3**	**28.4**	**0.0**	**20.5**	**0.3**	**100.0**	**5,428**

Table 2.13 and Figure 2.4 demonstrates that when we classified employed women by current occupation, 40 percent were farmers or herders, 26 percent were employed as managers, professionals, technicians or clerks, and 17 percent were employed in sales or services. Upon examination of occupation by age group, the percentage of women working as managers, professionals, technicians and clerks increased with increasing age, rising from 3 percent among women age 15-19 to 35 percent among women age 45-49. Notably, the largest percentage of employed women working as farmers or herders was composed of women aged 15-19 (79 percent), rural women (67 percent), and women from the Southern Region (59 percent). However in urban areas, 40 percent of employed women were managers, professionals, technicians or clerks, and 26 percent were sales or service workers.

Most of the employed women, with primary or less education (90 percent), were farmers or herders, while only small proportion (12 percent) of employed women with post secondary education shared this occupation. Majority (72 percent) of women with secondary education or higher were employed as managers, professionals, technicians, clerks, or as sales or service workers.

Table 2.13 Percent Distribution of Employed Women by Current Occupation According to Background Characteristics, Mongolia 2003

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	3.0	7.3	79.0	6.9	2.6	1.3	0.0	100.0	233
20-24	14.5	14.1	60.1	7.4	2.4	1.4	0.0	100.0	715
25-29	23.3	16.1	47.8	6.2	4.6	2.0	0.0	100.0	950
30-34	23.7	19.4	36.8	7.9	8.4	3.8	0.0	100.0	1,019
35-39	30.8	17.3	28.1	10.4	8.2	5.1	0.0	100.0	999
40-44	32.9	19.2	28.7	7.0	6.9	5.2	0.0	100.0	951
45-49	35.3	16.6	29.6	7.0	5.9	5.7	0.0	100.0	561
Residence									
Urban	40.3	26.0	3.7	12.5	11.7	5.8	0.0	100.0	2,315
Rural	14.8	10.2	66.8	4.1	2.0	2.2	0.0	100.0	3,113
Region									
Central	18.3	16.2	48.9	8.6	5.0	3.0	0.0	100.0	1,913
East	20.2	11.7	52.8	7.3	4.4	3.6	0.0	100.0	496
West	22.2	13.3	55.3	3.5	2.7	3.0	0.0	100.0	1,254
South	20.0	9.8	59.1	3.5	3.7	4.0	0.0	100.0	430
Ulaanbaatar	43.3	25.6	1.4	11.8	12.4	5.4	0.0	100.0	1.335
Highest Education Level									
Primary or Less	0.8	2.0	89.7	4.5	1.2	1.9	0.0	100.0	648
Incomplete Secondary	2.4	10.3	70.4	7.5	4.2	5.2	0.0	100.0	1,174
Complete Secondary	10.0	25.5	37.3	12.1	9.5	5.5	0.0	100.0	1,237
More than Secondary	52.1	19.8	12.4	6.4	6.7	2.6	0.0	100.0	2,369
Total	**25.6**	**16.9**	**39.8**	**7.7**	**6.2**	**3.7**	**0.0**	**100.0**	**5,428**

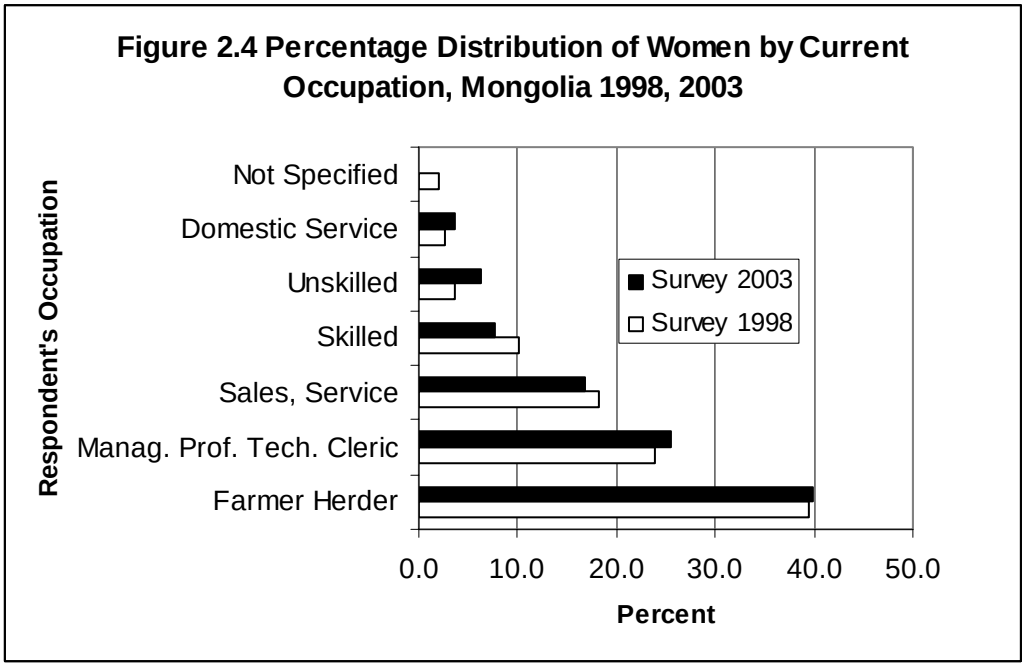


Table 2.14 presents information regarding who decided how to use the money that women earned. About one third (31 percent) of all women who received cash income reported that they decide how to spend their earnings, and 48 percent decide jointly with their husbands or partners. The percentage of women who decided how to spend their earnings increased with age, rising from 9 percent among women age 15-19 to 44 percent among women age 45-49. However, 64 percent of women ages 15-19 reported that someone else (generally a parent) decides how to spend their earnings. The percentage of women who make their own decision regarding how to spend their earnings was two times higher in urban areas (44 percent) than rural areas (21 percent). This percentage increased with increase in education, from 17 percent among the least educated to 40 percent among the best-educated women.

Table 2.14 Percent Distribution of Women Receiving Cash Earnings by Person Who Decides on Use of Earnings, According to Background Characteristics, Mongolia 2003

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	9.3	2.8	13.4	63.9	10.6	100.0	216
20-24	21.0	10.6	43.3	19.4	5.7	100.0	700
25-29	25.7	14.2	51.7	5.9	2.6	100.0	931
30-34	30.3	12.1	54.7	2.0	0.9	100.0	1003
35-39	35.5	10.7	52.0	0.5	1.3	100.0	993
40-44	37.3	11.4	50.0	0.3	1.0	100.0	946
45-49	44.2	11.1	42.7	0.0	2.0	100.0	550
Residence							
Urban	43.9	7.6	43.4	3.1	2.0	100.0	2295
Rural	21.4	14.2	52.2	9.4	2.7	100.0	3044
Region							
Central	27.1	10.2	53.6	6.0	3.0	100.0	1857
East	27.9	12.9	48.7	8.2	2.3	100.0	487
West	25.1	17.7	45.1	10.9	1.1	100.0	1237
South	22.8	7.2	56.4	9.1	4.4	100.0	429
Ulaanbaatar	45.9	8.0	41.6	2.3	2.2	100.0	1329
Highest Education Level							
Primary or Less	16.5	14.3	39.5	24.4	5.3	100.0	623
Incomplete Secondary	22.1	16.3	49.3	9.2	3.1	100.0	1145
Complete Secondary	30.6	10.9	50.9	5.1	2.6	100.0	1213
More than Secondary	39.5	8.5	49.1	1.6	1.3	100.0	2358
Current Marital Status							
Not Married	53.1	2.3	11.5	24.6	8.5	100.0	1429
Currently Married	23.0	14.7	61.9	0.2	0.2	100.0	3910
Total	**31.1**	**11.4**	**48.4**	**6.7**	**2.4**	**100.0**	**5339**

CHAPTER III

FERTILITY

Tserenkhand Biderya and Tsedmaa Baatar

In recent years, one of the most remarkable trends observed within the world population has been the decline of fertility. Between 1980 and 2001, the world total fertility rate declined from 3.7 in 1980 to 2.6 in 2001. Although the reduction in fertility worlwide is usually explained by social and economic changes in general, it is due to change in reproductive health behaviour behavior resulting from socio-economic changes.

Similarly, fertility decline in Mongolia began in the mid 1970s. During 1990, Mongolia experienced a sharp decline in fertility rates. This marked decline was direclty correlated with the transition from a socialist systme to a market economy. This dramatic shift in economic structure resulted in tremendous social and population policy changes.

Mongolia's population policy target endorsed in 1996 to promote the stable growth of population and maintain the annual growth rate at 1.8 percent was not fulfilled. The annual population growth in Mongolia stood at 1.3%.

In 2004 Mongolia updated and approved a Population Development Policy. The main objective of the Population Development Policy is to ensure a sustainable population growth and to create enabling environment for population development and a long, healthy and productive lives for the population.

The nucleus of the population policy lies in ensuring the stable growth of population through promotion of births based on free choice and in respect of reproductive right and reduction of morbidity and mortality.

This chapter presents the current fertlity level and its trend during the past 5 years by selected characteristics and compares them with results of the first Reproductive Health Survey (RHS) conducted in 1998.

Fertility levels and Trends

Table 3.01 presents age-specific and cumulative fertility rates and crude birth rates for the three years preceding the survey by urban-rural residence. Urban age-specific fertility rates were significantly lower than rural rates for all age groups 15-49. In both urban and rural areas, women aged 20-24 had the highest age-specific fertility rate. When these statistics were compared with 1998 RHS data, the age-specific fertility rate of women age 20-24 were still the highest among women aged 15-44 years in 1998, but the age-specific fertility rate of 2003 was significantly lower than that in 1998 for all age groups. However, between the periods 1996-1998 and 2001-2003, in the youngest age group (15-19), the fertility rate declined slightly in urban areas (from 38 to 33 per 1000). The fertility rates increased in the rural areas (from 72 to 81 per 1000).

The total fertility rate (TFR) was used to summarize the current level of fertility, and was calculated by summing the age-specific rate. TFR can be interpreted as the number of children a women would have by the end of her childbearing years if she were to pass through those years bearing children at the currently observed age-specific rates. The current TFR was estimated to be 2.5 which indicated that an average woman would bear 2.5 children during her reproductive life. Using data reflecting the number of children born and still living (surviving) by age, indirect estimates of TFR by MORTPAK procedure was performed. The TFR obtained based on an adjustment factor for the age group 20-25 was 2.49 which was almost identical with the direct estimate of 2.50. Note the MORTPAK procedure and detailed output of TFR which is provided at the end of this Chapter. The TFR declined considerably from the TFR for the period 1996-1998 (3.06 births per women). Despite this decline in fertility over 5-year period, the current TFR was still above the replacement fertility level of 2.1 births per women. The survey results indicated that between the periods 1996-1998 and 2001-2003, TFR in urban areas had declined moderately from 2.46 births per women to 2.14 births per women, which was close to replacement level. However, TFR for rural women indicated a substantial decline (difference of 0.77 births) during the 5-year period.

Table 3.01 Age-specific and Cumulative Fertility Rates and Crude Birth Rate for the Three Years Preceding the Survey, by Urban-Rural Residence, summary information for RHS 1998, Mongolia 2003

Variable & Category	Residence		RHS 2003	RHS 1998
	Urban	Rural	Total	Total
Age 5-year Group				
15-19	33	81	53	54
20-24	149	197	173	216
25-29	124	155	140	169
30-34	73	92	82	105
35-39	41	45	43	50
40-44	7	8	7	18
45-49	1	0	1	
Fertility Rate				
TFR 15-49	2.14	2.89	2.50	3.06
TFR 15-44	2.13	2.89	2.49	3.06
GFR	72	104	87	113
CBR	18.9	26.7	22.6	28.5

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

Table 3.01 also shows the general fertility rate (GFR) and the crude birth rate (CBR) for the three years prior to the survey. The GFR represents the number of live births per 1000. Between the periods 1996-1998 and 2001-2003, the GFR declined substantially, from 113 to 87 women age 15-44 years. Over the same periods, the GFR in rural areas declined from 141 to 104, while in urban areas it declined from 87 to 72. The rural GFR remained relatively higher than that of urban residents.

The crude birth rate (CBR) was the number of births in a year per 1000 mid-year population, and was calculated by summing the product of age-specific fertility rates

and proportion of women in the specific age group out of the total de-facto population. The CBR in rural areas (26.7) was substantially higher than that in urban areas (18.9). The overall CBR was 22.6, which was lower than CBR of 1998 RHS.

Between the survey periods, the decline was sharper for rural areas (from 33.7 to 26.7) than for urban areas (from 23.1 to 18.9).

Fertility Differentials

Table 3.02 presents differentials in TFR and CBR by residence, region and level of education. The first column in the table presents TFRs for 3-year period (2001-2003) and the third column shows the mean number of children born (CEB) to the older women (age 40-49).

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 2003

Variable & Category	Total Fertility Rate	Currently Pregnant %	Mean CEB (40-49)
Residence			
Urban	2.14	3.22	3.76
Rural	2.89	3.43	5.06
Economic Region			
Central	2.62	3.15	4.55
East	2.83	3.02	5.21
West	2.90	3.63	4.88
South	2.97	3.13	4.74
Ulaanbaatar	1.94	3.41	3.54
Monthly average income per person			
No income, less than 8500	2.70	3.14	4.69
8501-21250	2.55	3.53	4.64
21251-42500	2.41	3.18	4.14
More than 42501	2.21	3.24	3.48
Highest Education Level			
Primary or Less	3.17	3.09	6.08
Incomplete Secondary	2.75	3.64	5.21
Complete Secondary	2.37	3.97	4.05
More than Secondary	2.42	2.67	3.74
Total	**2.50**	**3.32**	**4.34**

The mean number of CEB is an indicator of cumulative fertility and CEB of women age 40-49 represents completed fertility. If fertility had remained the same over time, TFR and CEB would be similar or equal. Among regions, the highest TFR was discovered in the Southern Region (2.97), while the lowest TFR was in Ulaanbaatar (1.94). The TFR decreased with rising education level from 3.17 among women with primary education to 2.42 among women with higher secondary education. Completed fertility of women age 40-49 was higher in rural areas (5.06) than in urban areas (3.76). However, the highest completed fertility was in the Eastern Region (5.21) and the lowest rate was in Ulaanbaatar (3.54). Thus, the difference

between current and completed fertility (4.3 versus 2.5) indicated a substantial fertility decline. Between the two surveys periods, TFR declined in all regions. Ulaanbaatar had the lowest TFR (2.17 in 1998 RHS and 1.94 in 2003 RHS). TFR in the Western Region was the highest in 1998 RHS (3.85). However, in the present survey, the highest TFR was discovered in the Southern Region (2.97) followed by the Western Region (2.90) and Eastern Region (2.83).

As in the 1998 RHS, the current fertility decreased as the education level of women increased. The TFR for each educational level declined between the survey periods.

According to the table 3.02, total fertility rates of women of 15-49 years of age ranged between 1.94 and 3.17 depending on residence, region and educational level. The total number of children born to women age 40-49 ranged between 3.54 and 6.08. Thus, fertility declined within certain subgroups of women. A comparison between TFRs, taken from the RHS 1998 and RHS 2003 indicated that fertility had declined in all subgroups, especially in rural areas, among women with incomplete and complete secondary education, in the Western and Central Regions.

The data on average income per household member was collected by asking household head. As per Table 3.02 the fertility is found high for women with no income or low income and low education. Like with education level, the fertility declines with increasing income level.

Cumulative fertility

Table 3.03 shows the percent distribution of all women and of currently married women by the total number of children born, and the mean number of children born and still living, according to age group. Less than one fourth (23 percent) of all women did not have children and over half (53 percent) of all women had one to three children. In Mongolia, most of childbearing takes place within marriage. From the second panel of table 3.05, about two thirds (66 percent) of currently married women have 1-3 children. Overall, the mean number of CEB for all women was 2-3, this figure increased to 2.9 for currently married women.

The mean number of CEB for all women increased with increasing age of women, from 0.1 among women aged 15-19 to 4.9 among women aged 45-49. The corresponding figures for married women were from 0.7 among women aged 15-19 to 5.0 among women aged 45-49. Thus, the mean number of CEB women aged 45-49 was about the same (5 children) for married women and unmarried women, aged 45-49. The CEB death rate was 10 percent among married and unmarried women. The inclusion of living children in the final column reflects indirect estimates for fertility, and infant and child mortality.

Table 3.03 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 2003

Variable & Category	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	94.0	5.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1347	0.06	0.06
20-24	42.3	42.6	13.7	1.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	1420	0.75	0.71
25-29	12.4	34.5	35.7	13.3	3.9	0.3	0.0	0.0	0.0	0.0	0.0	100.0	1509	1.63	1.53
30-34	4.0	15.7	38.5	23.1	12.8	4.1	1.6	0.2	0.0	0.0	0.0	100.0	1520	2.45	2.27
35-39	1.5	6.9	24.3	27.7	22.1	9.0	5.6	2.0	0.6	0.2	0.1	100.0	1428	3.27	2.96
40-44	0.9	4.6	16.1	21.9	21.2	15.8	10.8	3.8	2.9	1.3	0.8	100.0	1276	4.01	3.56
45-49	0.5	3.8	9.8	15.4	18.6	17.0	14.6	7.5	5.5	3.6	3.8	100.0	814	4.87	4.17
Total	**23.1**	**17.5**	**21.0**	**14.7**	**10.6**	**5.8**	**3.9**	**1.5**	**1.0**	**0.5**	**0.5**	**100.0**	**9314**	**2.26**	**2.04**
Currently Married Women															
Age 5-Year Groups															
15-19	36.4	58.4	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	77	0.69	0.65
20-24	15.5	59.6	22.4	2.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	100.0	800	1.12	1.08
25-29	4.7	33.4	41.1	15.7	4.8	0.4	0.0	0.0	0.0	0.0	0.0	100.0	1220	1.84	1.73
30-34	0.8	12.7	41.0	24.8	14.1	4.6	1.8	0.2	0.0	0.0	0.0	100.0	1317	2.61	2.42
35-39	0.6	4.3	23.5	29.3	23.6	9.4	6.1	2.2	0.7	0.2	0.1	100.0	1251	3.41	3.09
40-44	0.5	3.1	15.2	21.9	21.7	17.2	11.0	4.0	3.3	1.3	0.8	100.0	1064	4.13	3.67
45-49	0.3	2.3	9.1	15.4	17.9	17.2	15.8	8.4	5.7	4.2	3.7	100.0	616	5.03	4.30
Total	**3.7**	**18.9**	**27.4**	**19.4**	**13.9**	**7.5**	**5.0**	**2.0**	**1.3**	**0.7**	**0.5**	**100.0**	**6345**	**2.90**	**2.62**

The proportion of women who have not given birth was lower than that in 1998 RHS by 2 points. However, the proportion of women who had one to three children had increased to 4 points. For RHS 1998 and RHS 2003, the overall mean CEB for all women dropped from 2.4 to 2.3, and the mean for currently married women declined from 3.1 to 2.9.

The proportion of currently married women who gave birth to 1-3 children (66 percent) which was higher than that of RHS 1998 by 3 points. The proportion of women who gave birth to 2 children was the highest for both surveys RHS 1998 and RHS 2003 (25 percent and 27 percent respectively). When CEB numbers were compared by age during the 1998 RHS and 2003 RHS, the average number of CEB to women increased with increasing age of women. However, the number of CEB to married and unmarried women decreased over the two survey periods. For instance, among older women aged 45-49 the number of CEB to all and married women was 6 children for both groups in 1998 RHS. The current survey indicated that the CEB decreased to an average of 5 children.

Age at First Childbirth

Maternal age at the time of birth of the first child was an important reproductive health indicator closely related to the fertility rates.

Table 3.04 shows the percent distribution of women by age at first birth according to current age of women. The percentage of women who gave birth before age 20 by age group is indicated by adolescent fertility decline first and increase then. For example, about 27 percent of women aged 45-49 experienced their first birth before age 20. This number declined to 15 percent among women aged 30-34, and then increased to 24 percent among women aged 20-24. This number increase implied that women aged 20-24 began childbearing at younger ages than older women had in the past. Similar distribution of adolescent births by age group was observed in the 1998 RHS. Roughly, 27 percent, 15 percent and 24 percent of women aged 45-49, 30-34 and 20-24 respectively experienced their first birth before 20 years of age. The 1998 RHS indicated that the median age at first birth was 22 in all age groups except within the age groups 40-44 and 45-49. The 2003 RHS revealed that the median age remained 22 years old for all age groups. In the 2003 RHS, over 50% of women aged 40-49 and over 60% of women at aged 30-39 gave birth to their first children during their 20-24 years. A similar pattern was observed in the 1998 RHS.

Table 3.04 Percent Distribution of Women by Age at First Birth, According to Current Age, Mongolia 2003

Age 5-Year Groups	Age at First Birth									
	No Birth	<15	15-17	18-19	20-21	22-24	25+	Total	Number	Median
15-19	94.0	0.0	3.1	2.9	0.0	0.0	0.0	100.0	1,347	-
20-24	42.3	0.1	4.2	19.6	21.9	12.0	0.0	100.0	1,420	-
25-29	12.4	0.0	4.2	16.1	26.8	30.9	9.6	100.0	1,509	22.3
30-34	3.9	0.1	2.2	13.2	35.9	30.7	14.1	100.0	1,520	21.9
35-39	1.5	0.0	3.2	12.5	29.6	38.2	15.0	100.0	1,428	22.3
40-44	0.9	0.0	3.8	13.9	30.6	32.4	18.4	100.0	1,276	22.1
45-49	0.5	0.2	7.4	19.3	26.4	30.7	15.5	100.0	814	21.7

Table 3.05 shows the median age at first birth by background characteristics, including age at time of survey, residence, geographic regions and education. Since less than 50 percent of women aged 20-21 had given birth by age 20, the median age at first birth cannot be calculated. Thus, median age at first birth was calculated for age group 25-49 and was 22.1. This was slightly higher than was indicated in the 1998 RHS (21.6). The median age slightly increased within each age group when compared to those in the 1998 RHS. Like the previous survey, in 2003 RHS the median age at first birth of urban women (22.5) was higher than that in rural areas (21.7).

Geographically, the median age at first birth was higher in Ulaanbaatar (22.6) and the Western Region (22.4), followed by the Central Region (21.8). According to the data revealed by the 1998 RHS, the median age at first birth was younger in the Eastern and the Southern Regions (both 20.9).

Like in the 1998 RHS, the urban women experienced their firth birth at an older age (22.5) when compared to their rural counterparts (21.7) as indicated during the 2003 RHS.

Table 3.05 Median Age at First Birth Among Women Aged 25-49 Years, by Current Age and Selected Background Characteristics, Mongolia,1998, 2003

Background Characteristics	Age 5-year Group					2003	1998
	25-29	30-34	35-39	40-44	45-49	25-49	25-49
Residence							
Urban	22.8	22.3	22.6	22.6	22.1	22.5	22.0
Rural	21.8	21.6	21.9	21.6	21.2	21.7	21.3
Regions							
Central	21.6	21.7	22.1	21.8	21.2	21.8	21.3
East	21.6	21.4	22.2	21.2	21.6	21.6	20.9
West	22.5	22.3	22.5	22.6	22.0	22.4	22.2
South	21.1	21.1	21.3	21.1	20.7	21.1	20.9
Ulaanbaatar	23.3	22.4	22.6	22.7	22.1	22.6	22.1
Highest Education Level							
Primary or Less	21.3	21.1	20.7	20.4	19.6	20.5	20.1
Incomplete Secondary	21.1	21.1	20.9	21.0	20.5	21.0	20.6
Complete Secondary	22.1	22.0	22.3	22.0	22.2	22.1	21.7
More than Secondary	23.5	22.2	22.7	22.9	22.5	22.7	22.2
Total	**22.3**	**21.9**	**22.3**	**22.1**	**21.7**	**22.1**	**21.6**

When accounting for educational background, median age at first birth increased with higher educational levels. For example, 20.5 percent of women with a primary educational level experienced the birth of their first child at the age of 20.5 while the median age at first birth for women with educational level beyond the full secondary was 22.7.

Summary and Conclusion

During the first RH Survey 1998, the TFR was 3.1 children. This number decreased to 2.5 during the second RH Survey 2003. TFR varied by geographic region. During the 1998 RHS, the highest total fertlity rate was registered in the

Western Region (3.85) and the lowest in Ulaanbaatar (2.17). During the 2003 RHS, the highest TFR occurred in the Southern Region (2.97), followed by the Western Region (2.90). The lowest TFR (1.94) was found in Ulaanbaatar. As in the previous survey, the fertlity rate negatively correlated with the women's educational level and was discovered to be lower in urban centers and higher in rural areas.

There is inverse relation between the fertility level and income. Most of women who gave birth received maternity and postnatal benefit, however, not a few mothers answered not to have received an infant care benefit.

The mean CEB for all women was 2.3. This figure increased to 2.9 CEB for married women. The completed fertility (CEB of women age 45-49) was about 6 for both married women and unmaried women during the 1998 RHS. This number decereased to 5 CEB during the 2003 RHS.

The median age at first birth has increased slightly from 21.6 during the 1998 RHS to 22.1 during the 2003 RHS. As with other fertility indicators, median age at first birth increased with increased educational level of women, as indicated in both the 1998 and 2003 RH Surveys.

A trend of declining fertility occurred in almost all population subgroups at various levels. Several contributing factors are late marriage age, increased preference for smaller family size due to economic conditions, increased use of modern contraception, increased abortion rates and breastfeeding for longer term.

CHAPTER IV

FAMILY PLANNING

Soyoltuya Bayaraa, Uyanga Turbat

The Reproductive Health Survey (RHS) of 1998 was first conducted five years ago. In order to obtain more detailed information, the RHS 2003 included questions regarding family planning. These questions were similar to those in the 1998 survey, with new questions added regarding access to and use of contraceptives. Similar to the previous survey, the current survey asked questions in order to collect information regarding women of reproductive age and roles of husbands 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

Women were classified as "knowing" a method if either they named it spontaneously, or if they recognized it when the interviewer described it. As in the 1998 RHS, contraceptive methods were divided into modern and traditional methods. The availability and use of female condoms increased, therefore, condoms were split into two categories: male and female condoms. Thus, modern methods consist of pills, IUD, injections, Norplant/implants, diaphragm/foam/jelly, male condom, female condom, female sterilization and male sterilization, while traditional methods include periodic abstinence and withdrawal. Methods other than the modern and traditional were specified as others.

Table 4.01 indicates that knowledge of family methods was almost universal among both all women and married women. The percentage of women who were aware of contraception in general was 98 percent for all women and nearly 100 percent for currently married women. Regarding knowlege of modern forms of contraception, the percentage for all women was 98 percent and for currently married was 99 percent.

In the RHS 2003, the percentage of all women who were familiar with any contraceptive method had increased slightly by 1 point compared to the survey (RHS 1998) conducted five years ago. Among the married women, this percentage was almost the same when the two surveys were compared. The percentage of all women who had knowledge of modern methods increased by 1 point, while the percentage for married women was same for 1998 and 2003. This small increase demonstrated that the level of knowledge of family planning methods among women of reproductive age was almost universal. Table 4.01 also shows that among all women, the most commonly known modern methods are pills (93 percent) and IUD (93 percent) as opposed to male sterilization (30 percent), diaphragm, foam, and jelly (23 percent), which were the least known methods.

Of the two traditional methods, periodic abstinence/calendar method was more commonly known (79 percent). According to the previous survey, the percentage of women who knew about traditional contractive methods decreased by 4 points.

The knowledge levels of both modern and traditional contraceptive methods were higher 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 improve their reproductive health. The mean number of methods known by currently married women was 7.6 in comparison with 7.1 for all women.

Table 4.01 Percentage of All Women and of Currently Married Women Who Know Any Contraceptive Method by Specific Method, Mongolia, 1998, 2003

Contraceptive Method	All Women		Currently Married Women		All Husbands
	1998	2003	1998	2003	
Any Method	96.7	98.1	99.3	99.5	99.4
Any Modern Method	96.6	97.9	99.2	99.3	99.4
Pills	86.5	92.7	93.0	96.2	82.9
IUD	92.6	92.7	98.4	98.5	93.9
Injections	78.7	87.5	87.4	93.8	73.2
Norplant/Implant	34.1	41.2	41.1	48.1	14.7
Diaphragm/Foam/Jelly	24.9	22.8	29.8	25.9	13.2
Male condom	88.1	92.4	91.4	94.2	96.3
Female condom	-	66.1	-	66.5	55.2
Female Sterilization	45.4	53.2	54.7	61.3	45.7
Male Sterilization	16.9	29.5	21.0	34.8	25.3
Any Traditional Method	85.0	80.9	91.7	87.8	82.9
Periodic Abstinence	84.0	79.4	90.6	86.3	78.0
Withdrawal	44.8	49.6	54.2	58.6	54.0
Other Methods	9.8	0.1	12.1	0.1	0.4
Mean Number of Methods Known	**6.1**	**7.1**	**6.7**	**7.6**	**6.3**
Number of Women	7,461	9,314	4,899	6,345	4,212

- data are not available

Almost all of the husbands (99 percent), who participated in the survey, knew at least one family planning or modern contraceptive method. This number was similar to the level for currently married women. Husbands demonstrated better knowledge of modern methods (99 percent) than traditional methods (83 per cent). As seen in Table 4.01, male condom (96 percent) and IUD (94 percent) were best known by husbands.

The variations in knowledge of family planning methods of currently married women presented in the Table 4.02, by age group, place of residence, region and educational level were relatively small (not more than 2 percent). Compared to other age groups and to the results of 1998 survey, 100 percent of adolescents age 15-19 knew about contraceptive methods. Urban married women had a slightly higher knowledge level when compared with the rural married women. There was a very small difference in contraceptive knowledge when aimag regions and levels of education of married women were taken into account.

Table 4.02 Percentage of Currently Married Women Who Know at Least One Method by Selected Background Characteristics, Mongolia 1998, 2003

Background Characteristics	Knowledge of contraception				Number of Married Women	
	Knows Any Method		Knows Modern Method			
	1998	2003	1998	2003	1998	2003
Age Group						
15-19	97.6	100.0	97.6	100.0	85	77
20-24	99.5	99.3	99.5	99.1	767	800
25-29	99.1	99.3	99.0	99.3	1,110	1,220
30-34	99.5	99.6	99.5	99.4	1,010	1,317
35-39	99.2	99.6	99.2	99.5	957	1,251
40-44	99.5	99.6	99.1	99.2	633	1,064
45-49	98.8	99.5	98.8	99.4	337	616
Residence						
Urban	99.9	99.8	99.9	99.7	2,384	3,135
Rural	98.6	99.2	98.5	99.0	2,515	3,210
Region						
Central	99.2	99.8	99.1	99.6	1,717	2,169
East	99.8	99.7	99.8	99.5	471	614
West	98.1	98.3	98.0	98.0	1,075	1,351
South	99.7	99.8	99.7	99.8	335	418
Ulaanbaatar	100.0	99.9	100.0	99.8	1,301	1,793
Highest Education Level						
Primary or Less	97.0	97.6	96.8	97.3	403	510
Incomplete Secondary	98.5	98.9	98.2	98.8	1,052	1,386
Complete Secondary	99.6	99.8	99.6	99.6	1,335	1,740
More than Secondary	99.9	100.0	99.9	99.8	2,109	2,709
Total	**99.3**	**99.5**	**99.2**	**99.3**	**4,899**	**6,345**

Table 4.03 illustrates whether women and men have heard a message about family planning through media such as radio and TV in the month prior to interview, by age group, place of residence, region and educational level. The percentage of all women and husbands who did not receive any information on family planning from radio and TV had declined by 19 points when compared with the previous survey. In terms of variations by age, residence, region, and education, the highest percentage of women who did not receive any information on family planning was from age group 15-19 (53 percent), in rural areas (53 percent), in the western region (61 percent), and in lower educational levels (68 percent).

Women received information about family planning more by TV than by radio. Although this picture was true for all age groups, the share of rural women who obtained information from radio was higher than that of urban 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 2003

Background Characteristics	Heard Family Planning Message on Radio or Television						Know that contraceptives are distributed without charge	Number of women
	Radio/ Television	Radio Only	Television Only	Neither	Total	Number of Cases		
Age Group								
15-19	13.1	4.4	29.8	52.7	100.0	1,347	42.6	1,347
20-24	16.3	7.9	27.0	48.8	100.0	1,420	72.9	1,420
25-29	18.6	8.5	27.2	45.7	100.0	1,509	85.2	1,509
30-34	19.7	6.9	32.1	41.3	100.0	1,520	87.9	1,520
35-39	21.8	7.3	29.7	41.2	100.0	1,428	87.5	1,428
40-44	22.6	6.7	28.5	42.2	100.0	1,276	82.3	1,276
45-49	23.1	6.0	29.0	41.9	100.0	814	78.4	814
Residence								
Urban	22.9	2.0	37.4	37.7	100.0	4,973	74.8	4,973
Rural	14.8	12.5	19.5	53.3	100.0	4,341	79.4	4,341
Region								
Central	18.7	9.6	33.9	37.8	100.0	2,983	82.3	2,983
East	17.5	7.1	21.5	53.8	100.0	827	87.1	827
West	12.4	9.3	17.5	60.8	100.0	1,873	71.5	1,873
South	21.2	11.0	24.3	43.4	100.0	608	84.0	608
Ulaanbaatar	23.6	1.8	34.5	40.1	100.0	3,023	70.9	3,023
Highest Education Level								
Primary or Less	7.8	9.7	14.3	68.2	100.0	1,132	54.9	1,132
Incomplete Secondary	14.5	9.3	22.5	53.8	100.0	2,280	71.8	2,280
Complete Secondary	19.8	6.4	29.9	43.9	100.0	2,570	79.6	2,570
More than Secondary	25.5	4.7	37.9	31.9	100.0	3,332	85.9	3,332
	Reproductive Health Survey, 2003							
All Women	**19.1**	**6.9**	**29.1**	**45.0**	**100.0**	**9,314**	**77.0**	**9,314**
All Husbands	**13.6**	**6.6**	**31.6**	**48.2**	**100.0**	**4,212**		
	Reproductive Health Survey, 1998							
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**		

While 2 percent of urban women received information about family planning by radio, 37 percent by TV, 13 percent of rural women received information by radio and 20 percent by TV. Among regions, more women in Ulaanbaatar received information on family planning by TV (35 percent) and more women in the southern region received information by radio (11percent). In terms of educational level, more women with higher education obtained information from TV (38 percent).

Among those who obtained information on family planning both by radio and TV, the percentage for urban women (23 percent) was slightly higher than for rural women (15 percent). The percentage of women in Ulaanbaatar (24 percent) was greater than in other regions. The proportion of women getting information both by radio and TV increased with the level of education. For example, percentage of women who obtained information both by radio and TV increased from 8 percent for women with primary education to 26 percent for women with higher education.

The comparison with the previous survey revealed that the percentage of women and men who obtained information on family planning both by radio and TV increased by 6.3 and 3 percent respectively. However, while the percentage of women and men receiving information only by TV increased (by 14.8 and 16 percent), the percentage of women and men receiving information by radio only had decreased by 2.5 and 0.5 percent.

The Reproductive Health Survey of 2003 asked whether women of reproductive age knew about the free of charge distribution of contraceptives and services. 77 percent of all women replied that they were aware of the free of charge distribution of contraceptives (Table 4.03). The percentage of women aged 15-19, urban women, in particular women living in Ulaanbaatar, and women with primary education, knew less about these free services. Hence, information about these services must be made available to the women of these groups in order to increase the use of free of charge contraceptive services.

Use of Contraception

This section presents information regarding past use and current use of contraception, with selected comparison to the information provided in the RHS 1998. Table 4.04 displays proportions of all women and currently married women who have ever used any contraceptive method by specific method and age, and summary information for RHS 1998.

a. Ever Use

Seventy five percent of all women and ninety two percent of currently married women reported that they have used a contraceptive method(s). The percentage of all women and currently married women who had ever-used any contraceptive method had increased by 9 points and 8 points respectively, as compared with the previous RHS. It is clear from Table 4.04, the percentage of women using modern methods, when compared with women using traditional methods, substantially increased over the 5-year period. For example, the percentage of all women and currently married women using modern contraceptives increased by 14 points for both groups of women, while the percentage of all women and currently married women using traditional methods decreased by 2 and 3 points respectively, over the 5-year period.

The survey findings also revealed that all women were more likely to have used modern contraceptive methods (71 percent) than traditional methods (40 percent). Among the modern contraceptive methods, they were more likely to have used the IUD. The level of IUD use was highest for women aged 35-39, with 70 percent of all women and 72 percent of currently married women of this age group reporting ever use of IUD. Of the traditional methods, periodic abstinence was most commonly used, and again, the level of its ever use was highest for women age 35-39. The level of ever use of any contraceptive method was lowest (9 percent) among adolescents of age 15-19.

The level of ever use of family planning methods for currently married women was higher than that of all women. Nearly 92 percent of currently married women had ever used modern contraceptive methods and only 8 percent had not used any contraceptive methods (modern or traditional) at all. No cases of male sterilization were reported in the 1998 survey. However, the findings of this survey indicated that there were 4 such cases.

Table 4.04 Percentage of All Women and of Currently Married Women Who Have Ever Used Any Contraceptive Method, by Specific Method and Age and Summary information of RHS 1998, Mongolia 2003

Age group	Used Any Method	Used Any Modern Method	Modern Method								Traditional Methods				
			Pills	IUD	Injec-tions	Norplant/ Implant	Diaph./ Foam/Jelly	Male condom	Female condom	Female Sterilizat.	Male Sterilizat.	Used Any Traditional Method	Period. Abstinence	Withd-rawal	Used Other Methods	Number of Women
All women																
15-19	8.5	7.4	1.6	1.9	0.7	0.1	0.0	4.8	0.4	0.1	0.0	3.3	2.1	1.8	0.0	1,347
20-24	63.3	59.2	22.7	26.6	13.5	0.1	0.6	34.3	2.7	0.2	0.0	26.8	19.5	15.6	0.1	1,420
25-29	87.1	84.2	38.4	52.3	21.4	0.6	1.7	44.9	2.5	1.5	0.1	41.2	33.7	21.7	0.0	1,509
30-34	93.4	91.2	41.3	67.5	21.9	0.7	2.4	43.5	3.4	2.6	0.0	51.6	44.5	25.3	0.1	1,520
35-39	94.3	89.4	37.0	70.1	21.1	0.7	2.1	41.6	2.7	4.9	0.1	55.3	51.1	21.7	0.0	1,428
40-44	91.5	84.5	33.1	66.8	17.1	0.7	2.9	36.6	1.5	4.6	0.1	53.4	50.3	16.6	0.1	1,276
45-49	86.9	76.9	22.0	64.7	8.4	0.5	2.8	25.2	1.8	2.9	0.1	52.8	50.9	9.8	0.1	814
Reproductive Health Survey, 2003																
Total	**74.8**	**70.6**	**28.8**	**49.4**	**15.5**	**0.5**	**1.7.**	**33.9**	**2.2**	**2.3**	**0.0**	**40.1**	**35.2**	**16.7**	**0.0**	**9,314**
Reproductive Health Survey, 1998																
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																
15-19	59.7	54.5	16.9	16.9	9.1	1.3	0.0	29.9	2.6	1.3	0.0	24.7	11.7	15.6	0.0	77
20-24	83.1	78.6	32.1	40.6	20.9	0.3	0.8	43.3	3.6	0.1	0.0	34.3	24.4	19.9	0.1	800
25-29	92.0	89.3	42.5	58.3	24.6	0.6	1.7	46.4	2.7	1.6	0.2	43.8	35.4	23.5	0.0	1,220
30-34	95.3	93.5	43.6	71.3	23.8	0.8	2.7	43.9	3.3	2.7	0.0	52.7	45.6	26.0	0.1	1,317
35-39	95.4	91.2	39.5	72.3	22.5	0.8	1.9	42.3	2.6	5.1	0.1	56.2	52.1	22.6	0.0	1,251
40-44	93.9	86.5	35.2	69.7	17.6	0.8	2.9	37.5	1.1	4.7	0.1	54.7	51.3	17.5	0.1	1,064
45-49	89.1	79.7	24.7	67.5	9.9	0.5	3.2	27.1	1.6	3.1	0.0	55.4	53.2	10.7	0.2	616
Reproductive Health Survey, 2003																
Total	**91.9**	**87.4**	**37.5**	**63.8**	**20.8**	**0.7**	**2.2**	**41.1**	**2.6**	**3.0**	**0.1**	**49.6**	**43.5**	**21.1**	**0.1**	**6,345**
Reproductive Health Survey, 1998																
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**

- data are not available

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

Table 4.05 Percentage of Husbands Who Have Ever Used Any Contraceptive Method, According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Used Any Method	Used Any Modern Method	Modern Method								Used Any Traditional Method	Traditional Methods		Used Other Methods	Number of Husband
			Pills	IUD	Injec-tions	Norplant/ Implant	Diaph./ Foam/Jelly	Male condom	Female condom	Female Sterilizat.		Period. Abstinence	Withd-rawal		
Age Group															
15-19	70.6	70.6	35.3	17.6	5.9	0.0	0.0	52.9	11.8	0.0	23.5	17.6	11.8	0.0	17
20-24	85.7	84.3	25.7	26.7	13.7	0.3	1.7	69.7	3.0	0.0	40.0	28.0	22.0	0.0	300
25-29	92.4	90.0	38.5	49.1	20.9	0.9	2.1	68.5	3.2	0.9	45.1	32.2	27.7	0.1	698
30-39	95.4	93.4	35.8	65.3	19.4	0.8	2.2	64.2	2.5	2.9	54.6	46.4	25.6	0.3	1,644
40-49	90.6	85.3	24.3	63.2	14.6	0.6	2.2	52.4	2.1	3.7	57.1	54.2	16.0	0.3	1,553
Residence															
Urban	94.9	90.8	29.5	55.6	12.8	0.7	2.6	70.8	2.9	2.9	62.2	54.5	27.5	0.3	2,119
Rural	89.8	87.4	33.1	62.3	22.1	0.8	1.7	50.8	2.2	2.4	43.2	36.4	16.6	0.1	2,093
Region															
Central	92.1	88.6	34.9	63.3	18.9	1.0	2.5	56.5	2.3	2.7	53.2	46.3	19.1	0.2	1,424
East	91.2	88.7	29.9	64.8	18.7	0.8	0.5	46.7	1.6	4.4	41.5	36.0	17.0	0.0	364
West	88.4	86.5	25.2	56.7	20.4	0.6	1.6	55.0	2.2	1.3	40.0	33.9	16.6	0.1	902
South	95.5	93.4	47.6	59.4	26.2	0.3	1.0	66.4	1.0	5.2	50.7	43.0	18.9	0.0	286
Ulaanbaatar	95.1	90.8	28.2	53.6	11.2	0.6	2.8	73.1	3.6	2.3	65.4	56.3	31.7	0.5	1,236
Highest Education Level															
Primary or Less	80.5	78.2	25.3	52.7	20.4	0.0	2.7	34.5	2.2	2.7	24.9	18.0	11.5	0.0	550
Incomplete Secondary	91.2	88.2	30.8	61.8	21.5	1.1	0.9	52.7	1.5	2.7	42.7	35.7	16.7	0.1	1,251
Complete Secondary	95.3	92.5	33.4	60.2	15.7	0.4	2.2	71.0	2.3	2.1	60.1	49.5	26.4	0.3	903
More than Secondary	95.8	91.8	32.6	58.0	14.0	0.8	2.9	71.2	3.6	2.9	66.9	61.1	27.9	0.4	1,508
All Husbands	**92.3**	**89.1**	**31.3**	**58.9**	**17.4**	**0.7**	**2.1**	**60.9**	**2.5**	**2.6**	**52.8**	**45.5**	**22.1**	**0.2**	**4,212**

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

Table 4.05 presents ever use of contraception among husbands by selected characteristics. Ninety two percent of men reported that they and their wives had used at least one contraceptive method, 89 percent of them used modern contraceptives and 53 percent used traditional methods. Of the modern methods used, the use of male condom was the highest (61 percent), followed by IUD (59 percent). The male condom was more commonly used by younger men aged 20-29, while relatively older men or men age 30-49 reported that they were more likely to choose IUD as their family planning method. More urban couples used modern and traditional methods than rural couples (91 percent versus 88 percent for modern methods and 62 percent versus 43 percent for traditional methods). However the use of IUD was higher for rural couples (62 percent) than for urban couples (56 percent), while the use of condoms was higher for urban couples (71 percent) when compared to rural couples (51 percent).

In terms of regional differentials, use of any contraceptives and modern contraceptives was higher for couples living in the southern region and in Ulaanbaatar. In contrast, traditional methods were more commonly used by couples of the central region and Ulaanbaatar, also by couples who had completed secondary and higher educational levels.

There were some variations in ever use of contraceptive methods reported by married women and husbands. For example, as shown in Tables 4.04-4.05, married women reported higher ever use of pills and IUDs than husbands (38 versus 31 percent for pill and 64 versus 59 for IUD). In contrast, the husbands' reports of ever use of condom (61 percent) was much higher than that reported by married women (41 percent).

b. Current Use

The situation with the current use of contraceptive methods by method and age group is presented in Table 4.06. If women (at the time of the survey) used two methods, the most effective method was accepted as the method currently used. For example, if a woman used one modern and one traditional contraceptive method, the modern method was taken as the method currently used. Likewise, if a woman used both pill and condom, the pill as the most effective method was taken as the method currently used.

Over half (54 percent) of all women currently use contraceptives in general. Forty five percent of the women used modern methods, eight percent used traditional methods and the remaining forty seven percent did not use any method.

The current use of contraceptive methods in general was higher for currently married women (69 percent) than for all women (54 percent). These percentages were similar to the percentages representing ever use of any contraceptive (92 percent versus 75 percent).

Table 4.06 Percent Distribution of All Women and of Currently Married Women by Specific Contraceptice Method Currently Used, According to Age, Mongolia 2003

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	Injections	Norplant/ Implant	Diaph./ Foam/Jelly	Male Condom	Female Condom	Female Sterilizat.		Period. Abstinence	Withdrawal				
All Women																	
15-19	5.1	4.2	0.6	1.5	0.2	0.1	0.0	1.8	0.0	0.1	0.9	0.8	0.1	0.0	94.9	100.0	1,347
20-24	42.5	38.5	8.7	19.2	3.5	0.1	0.0	6.9	0.0	0.2	4.0	3.3	0.7	0.0	57.5	100.0	1,420
25-29	63.3	56.9	11.5	30.4	6.2	0.3	0.1	6.9	0.1	1.5	6.4	5.6	0.8	0.0	36.7	100.0	1,509
30-34	73.7	65.1	13.0	38.4	5.3	0.3	0.0	5.6	0.0	2.6	8.6	8.2	0.4	0.0	26.3	100.0	1,520
35-39	77.7	63.2	10.6	34.7	7.1	0.2	0.1	5.3	0.3	4.9	14.6	14.1	0.5	0.0	22.3	100.0	1,428
40-44	66.7	52.3	7.6	29.5	4.9	0.3	0.1	5.2	0.0	4.6	14.3	13.8	0.5	0.1	33.3	100.0	1,276
45-49	33.7	23.8	3.7	14.1	0.9	0.0	0.0	2.1	0.1	2.9	9.8	9.6	0.2	0.0	66.3	100.0	814
Reproductive Health Survey, 2003																	
Total	**53.5**	**45.3**	**8.4**	**24.9**	**4.3**	**0.2**	**0.0**	**5.0**	**0.1**	**2.3**	**8.2**	**7.7**	**0.5**	**0.0**	**46.5**	**100.0**	**9,314**
Reproductive Health Survey, 1998																	
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																	
15-19	29.9	27.3	6.5	11.7	2.6	1.3	0.0	3.9	0.0	1.3	2.6	2.6	0.0	0.0	70.1	100.0	77
20-24	58.3	53.6	12.5	29.1	5.6	0.1	0.0	6.1	0.0	0.1	4.6	3.6	1.0	0.0	41.8	100.0	800
25-29	68.9	62.5	12.9	34.1	7.0	0.3	0.0	6.5	0.2	1.6	6.4	5.4	1.0	0.0	31.1	100.0	1,220
30-34	77.9	69.3	13.7	40.9	5.9	0.4	0.0	5.8	0.0	2.7	8.6	8.1	0.5	0.0	22.1	100.0	1,317
35-39	81.9	65.9	11.3	35.9	7.7	0.2	0.2	5.3	0.3	5.1	15.9	15.3	0.6	0.0	18.1	100.0	1,251
40-44	71.1	55.5	8.1	31.8	5.1	0.4	0.0	5.5	0.0	4.7	15.6	15.1	0.5	0.1	28.9	100.0	1,064
45-49	38.8	26.5	4.4	15.7	1.0	0.0	0.0	2.1	0.2	3.1	12.3	12.0	0.3	0.0	61.2	100.0	616
Reproductive Health Survey, 2003																	
Total	**69.0**	**58.4**	**11.0**	**32.8**	**5.8**	**0.3**	**0.0**	**5.4**	**0.1**	**3.0**	**10.6**	**9.9**	**0.6**	**0.0**	**31.0**	**100.0**	**6,345**
Reproductive Health Survey, 1998																	
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**

- data are not available

Compared with the previous survey, the use of any method and modern methods increased while the use of traditional methods and the level of non-use decreased. For example, among currently married women, the percentage using modern contraceptive methods had increased from 46 percent in the 1998 RHS to 58 percent in the 2003 RHS, while the percentage using traditional methods declined from 13 percent in 1998 to 11 percent in 2003.

Among currently married women, the popular methods currently used were the IUD (33 percent), pills (11 percent), injections (6 percent) and male condom (5 percent). The corresponding figures in 1998 were lower: IUD (32 percent), pills (4 percent), injections (3 percent) and male condom (4 percent). Conversely, the proportion of married women using the popular traditional method (periodic abstinence) declined from 13 percent in 1998 RHS to 10 percent in 2003 RHS. The use of modern and traditional contraceptives was highest among women age 30-39 and lowest among adolescents of age 15-19.

The information on current use of contraceptive methods for currently married women by specific method according to residence, region, educational level and by number of living children is presented in Table 4.07. Table 4.07 illustrates that general contraceptive use was relatively low for married women living in the western region, with primary educational levels and without children.

The survey findings show that the generalized use of modern and traditional contraceptive methods for urban married women was higher than those in rural areas by 1 point and 8 points, respectively, but the use of modern contraceptives for urban married women (55 percent) was less by 7 points than rural married women (62 percent). Married women living in rural areas were more likely to use modern methods of contraception, especially the IUD, pills and injections. The majority of married women living in urban areas, including Ulaanbaatar, tended to use modern methods such as IUD and pills. However, more traditional methods, such as periodic abstinence, were also commonly used (Table 4.07).

The differentials by regions demonstrated that women in the southern region practiced general contraceptive use most frequently (72 percent) and modern contraceptive (64 percent) while married women in Ulaanbaatar more commonly used traditional methods (17 percent). The lowest level of use of any contraceptive (66 percent) and modern methods (59 percent) was found among married women living in the western region and the lowest level of the use of traditional methods was found for currently married women in the eastern region (6 percent).

Table 4.07 Percent Distribution of Currently Married Women by Specific Contraceptive Method Currently Used, According to Selected Background Characteristics and summary information of RHS 1998, Mongolia 2003

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	Male Condom	Female Condom	Female Sterilizat.		Period. Abstinence	Withd-rawal				
Residence																	
Urban	69.4	54.6	11.1	28.7	4.4	0.2	0.1	6.7	0.1	3.4	14.7	14.0	0.7	0.0	30.6	100.0	3,135
Rural	68.5	62.0	10.9	36.8	7.2	0.3	0.0	4.2	0.1	2.6	6.5	6.0	0.5	0.0	31.5	100.0	3,210
Region																	
Central	70.1	61.3	11.2	35.3	6.0	0.4	0.0	5.3	0.2	3.0	8.8	8.2	0.6	0.0	29.9	100.0	2,169
East	69.5	63.5	12.5	36.5	5.9	0.2	0.0	3.1	0.0	5.4	6.0	5.9	0.2	0.0	30.5	100.0	614
West	66.2	58.8	8.7	35.3	7.4	0.2	0.0	5.6	0.1	1.6	7.3	6.5	0.8	0.0	33.8	100.0	1,351
South	72.0	63.9	17.2	27.3	9.3	0.7	0.0	4.5	0.0	4.8	8.1	7.7	0.5	0.0	28.0	100.0	418
Ulaanbaatar	68.8	51.4	10.4	27.8	3.5	0.2	0.1	6.5	0.1	2.8	17.3	16.6	0.8	0.1	31.2	100.0	1,793
Highest Education Level																	
Primary or Less	56.1	52.9	8.2	31.6	6.3	0.6	0.0	2.9	0.0	3.3	3.1	2.7	0.4	0.0	43.9	100.0	510
Incomplete Secondary	63.3	59.2	8.2	38.4	6.2	0.2	0.0	3.7	0.1	2.5	4.1	3.8	0.4	0.0	36.7	100.0	1,386
Complete Secondary	72.0	62.9	12.4	35.5	6.4	0.2	0.0	5.4	0.1	2.9	9.1	8.4	0.7	0.0	28.0	100.0	1,740
More than Secondary	72.4	56.1	12.0	28.4	5.1	0.3	0.1	6.8	0.1	3.2	16.2	15.5	0.8	0.0	27.6	100.0	2,709
Number of Living Children																	
None	20.0	15.2	5.6	4.1	1.1	0.0	0.0	3.7	0.0	0.7	4.8	3.7	1.1	0.0	80.0	100.0	270
1	62.5	54.4	13.2	27.5	5.6	0.2	0.0	6.9	0.0	1.0	8.1	7.4	0.7	0.0	37.5	100.0	1,285
2	77.6	64.8	12.1	39.2	5.1	0.4	0.1	5.3	0.2	2.6	12.8	12.2	0.7	0.0	22.4	100.0	1,391
3	76.0	63.2	11.6	36.0	5.6	0.5	0.1	5.5	0.1	4.0	12.8	12.3	0.5	0.0	24.0	100.0	1,296
4+	66.2	57.2	8.2	31.6	7.7	0.2	0.0	4.6	0.2	4.7	9.0	8.4	0.5	0.1	33.8	100.0	1,563
Reproductive Health Survey, 2003																	
Total	**69.0**	**58.4**	**11.0**	**32.8**	**5.8**	**0.3**	**0.0**	**5.4**	**0.1**	**3.0**	**10.6**	**9.9**	**0.6**	**0.0**	**31.0**	**100.0**	**6,345**
Reproductive Health Survey, 1998																	
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**

- data are not available

The differentials by educational level show that currently married women with secondary educational levels and higher had the highest level of use of any contraceptive (72 percent) including traditional methods (16 percent). Married women, who had completed their secondary education, reported using modern contraceptive methods most frequently (63 percent). As compared to women of other educational levels, currently married women with primary education had the lowest level of use of any contraceptive (56 percent), including both modern (53 percent) and traditional methods (3 percent). Currently married women with two and three children reported using both modern and traditional contraceptive methods more than those without children or with 4+ children.

Although there was a less than significant difference in use of modern contraceptives by selected background characteristics, there was a substantial variation in use of the traditional contraceptive methods. For example, among current users of traditional methods, an 8 point difference occurred between urban and rural currently married women, an 11 point difference between Ulaanbaatar and the eastern region, a 13 point difference between women with higher educational levels and those with primary educational levels, and an 8 point difference between women with two children and women without children.

Table 4.08 Percent Distribution of Currently Married Women by Specific Contraceptiñe Method Currently Used, How long current method being used, 2003

	Modern method							
	Pill	IUD	Injections	Implants/ Norplamt	Diaghram Foam/Jelly	Male condom	Female condom	Total
How long current method being used								
< 6 months	31.5	9.8	23.9	10.5	25.0	21.9	14.3	16.9
6-11 months	10.9	6.6	15.4	0.0	50.0	11.5	14.3	8.9
1-3 years	39.9	35.3	48.4	42.1	0.0	43.2	42.9	38.5
4-7 years	13.3	27.1	9.8	47.4	0.0	13.0	14.3	21.1
8, years or longer	4.4	21.1	2.5	0.0	25.0	10.4	14.3	14.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number of women	781	2,320	397	19	4	470	7	3,998

When asked how long the reported contraceptive had been used, majority (53 percent) of women using pills reported that they had been taking pills for 1-7 years (Table 4.08), and 35 percent of women using IUD stated that they had been using the IUD for 1-3 years. However, the majority of women (48 percent) who reported using the injection stated that they had been using this method for 1-3 years.

Table 4.09 Percent Distribution of Husbands by Specific Contraceptice Method Currently Used, According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Used Any Method	Used Any Modern Method	Modern Method							Traditional Methods			Used Other Methods	Not Currently Using	Total	Number of Husband
			Pills	IUD	Injections	Norplant/ Implant	Diaph./ Foam/Jelly	Male condom	Female Sterilizat.	Used Any Traditional Method	Period. Abstinence	Withdrawal				
Age Group																
15-19	47.1	41.2	23.5	5.9	0.0	0.0	0.0	11.8	0.0	5.9	5.9	0.0	0.0	52.9	100.0	17
20-24	49.0	45.0	10.7	19.3	5.7	0.0	0.0	9.3	0.0	4.0	3.0	1.0	0.0	51.0	100.0	300
25-29	65.3	58.6	12.5	29.2	5.6	0.7	0.0	9.9	0.7	6.7	5.4	1.3	0.0	34.7	100.0	698
30-39	76.9	67.1	11.2	38.4	6.1	0.2	0.1	8.3	2.8	9.8	9.0	0.8	0.1	23.1	100.0	1,644
40-49	64.8	50.2	6.7	27.7	5.4	0.1	0.0	6.9	3.3	14.6	14.2	0.4	0.1	35.2	100.0	1,553
Residence																
Urban	69.3	54.1	9.4	27.9	4.1	0.2	0.0	9.8	2.6	15.0	14.3	0.8	0.1	30.7	100.0	2,119
Rural	67.6	61.4	10.1	35.0	7.3	0.3	0.0	6.5	2.2	6.2	5.4	0.7	0.0	32.4	100.0	2,093
Region																
Central	69.2	59.6	10.5	31.8	6.3	0.4	0.0	8.1	2.5	9.6	8.8	0.8	0.0	30.8	100.0	1,424
East	64.8	60.2	10.2	34.6	5.2	0.3	0.0	6.0	3.8	4.7	4.1	0.5	0.0	35.2	100.0	364
West	64.4	58.6	7.5	34.8	7.5	0.2	0.0	7.2	1.3	5.8	5.2	0.6	0.0	35.6	100.0	902
South	76.6	67.1	15.0	29.7	8.7	0.0	0.0	8.4	5.2	9.4	8.7	0.7	0.0	23.4	100.0	286
Ulaanbaatar	69.7	52.1	9.2	28.0	3.2	0.2	0.1	9.4	2.1	17.3	16.4	0.9	0.2	30.3	100.0	1,236
Highest Education Level																
Primary or Less	55.6	51.6	6.7	32.7	7.1	0.0	0.0	2.7	2.4	4.0	3.1	0.9	0.0	44.4	100.0	550
Incomplete Secondary	66.7	60.6	9.3	34.7	7.4	0.6	0.0	5.9	2.6	6.1	5.3	0.8	0.0	33.3	100.0	1,251
Complete Secondary	73.3	61.0	11.2	33.6	4.9	0.1	0.0	9.4	1.9	12.1	11.0	1.1	0.2	26.7	100.0	903
More than Secondary	71.7	55.7	10.4	27.0	4.2	0.1	0.1	11.2	2.7	15.9	15.5	0.4	0.1	28.3	100.0	1,508
							Reproductive Health Survey, 2003									
All Husband	**68.4**	**57.8**	**9.8**	**31.4**	**5.7**	**0.3**	**0.0**	**8.1**	**2.4**	**10.6**	**9.9**	**0.7**	**0.1**	**31.6**	**100.0**	**4,212**
							Reproductive Health Survey, 1998									
All Husband	**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**	**1,557**

Table 4.09 demonstrates that 68 percent of husbands reported that they and their wives used at least one contraceptive method. 58 percent of the 68 percent reported using modern methods, and 11 percent reported using traditional methods. When compared with the RHS 1998, the use of modern contraceptives increased from 40 percent in 1998 to 58 percent in 2003, an increase 18 points. The use of traditional methods increased only by 2 points (from 9 percent in 1998 RHS to 11 percent in 2003 RHS). The level of contraceptive use, reported by husbands, was only a little less than the use of contraceptives as reported by currently married women. For example, husbands reported the use of IUD (less by 0.6 points), while the use of periodic abstinence was reported by both for husbands and currently married women (same number as reported in previous survey). The findings indicated that the knowledge of family planning, as well as the role and involvement of husbands, had improved.

Future in-depth studies related to the reproductive health of men, their involvement in family planning, and measures to be taken for improving the situation would be useful for fulfilling the targets included in the National Program on Reproductive Health.

Number of Children at First Use of Contraceptives

Table 4.10 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 2003

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	40.5	32.9	25.3	1.3	0.0	0.0	100.0	79	0.0
20-24	17.3	35.3	39.7	7.2	0.5	0.0	100.0	833	0.2
25-29	7.9	27.5	46.2	15.2	2.6	0.6	100.0	1,288	0.4
30-34	4.8	20.1	39.6	23.5	7.5	4.4	100.0	1,418	0.7
35-39	4.8	14.3	30.2	26.1	13.7	10.8	100.0	1,385	1.1
40-44	7.9	12.1	23.8	20.5	13.1	22.5	100.0	1,243	1.5
45-49	11.8	8.5	19.5	17.7	10.8	31.6	100.0	785	1.9
				Reproductive Health Survey, 2003					
Total	**8.6**	**19.6**	**33.8**	**19.1**	**8.3**	**10.7**	**100.0**	**7,031**	**0.8**
				Reproductive Health Survey, 1998					
Total	**16.3**	**18.7**	**27.8**	**17.0**	**8.5**	**11.7**	**100.0**	**5,479**	**0.8**

Table 4.10 shows the number and the median number of children of ever married women at the time of first use of contraceptives.

The RHS 2003 revealed that the number of women who reported lack of contraceptive use decreased significantly (16 percent in 1998 to 9 percent in 2003)., Among ever married women who reported general contraceptive method use, 19 percent had three and more children, 53 percent had 1-2 children and 20 percent were without children when they first used a contraceptive method. This pattern differed by age group of women. As in the RHS 1998, the percentage of women who had one child at the time of first contraceptive use was the highest for women aged 20-34.

Number of children at time of first contraceptive use decreased when compared with the RHS 1998. Though the overall median was the same for the 1998

RHS and 2003 RHS, the median at first use by age was generally lower for 2003 than 1998 (see Table 4.07 of RHS 1998 and Table 4.10 of RHS 2003). For example, the median number of children among women aged 45-49 at time of first use was 2.4 five years ago, this number was down to 1.9 in 2003.The median number of children for women aged 35-39 is down to 1.1 as compared to 1.4 in 1998. In addition, the percentage of women who first used a contraceptive method before their first child increased for all age groups, with women aged 20-24 constituting the highest percentage (35percent). This result demonstrated that women continued to use family planning methods at a younger age and at lower parities.

Knowledge of Women on Periodic Abstinence

Table 4.11 shows the results of the RHS 2003 related to knowledge of the fertile period during the ovulatory cycle for all women and periodic abstinence users.

Table 4.11 Percent Distribution of Women by Knowledge of the Fertile Period During the Ovulatory Cycle, for All Women and Periodic Abstinence Users, Mongolia 1998, 2003

Knowledge of Ovulatory Cycle	Users of Periodic Abstinence		All Women	
	1998	2003	1998	2003
At Any Time	0.3	0.3	0.6	0.8
After Period Ended	2.7	2.8	5.8	8.3
Middle of the Cycle	89.7	92.9	54.2	55.3
Before Period Begins	1.6	2.4	2.5	2.8
DK	5.8	1.7	36.8	32.8
Total	**100.0**	**100.0**	**100.0**	**100.0**
Number	709	721	7,399	9,273

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

The percentage of women giving a correct answer that a woman can get pregnant in the middle of the ovulatory cycle increased, compared with the percentage obtained five years ago (93 percent versus 90 percent). The number of women who “don’t know” decreased to 2 percent from the 1998 level (6 percent). There was no substantial change in the level of knowledge of all women.

Median Age of Sterilized Women, by number of years since operation

According to the 2003 RH Survey, 3 percent of currently married women reported that they had been medically sterilized. Table 4.12 shows age at of time of sterilization by years since operation. As compared with RHS 1998, the percentage of women sterilized under the age of 25 was relatively low (8 percent). Among sterilized women, 57 percent were from age 25-34 and 34 percent from age group of 35-44.

Table 4.12 Percent Distribution of Sterilized Women by Age at the Time of Sterilization, According to the Number of Years Since the Operation, Mongolia 2003

Years Since Operation	Age at Time of Operation					Total	Number of Women	Median Age (at Time of Sterilization)
	<25	25-29	30-34	35-39	40-44			
<2	1.7	15.5	25.9	46.6	8.6	100.0	58	35.2
2-5	8.1	24.4	33.7	20.9	12.8	100.0	86	32.9
6+	13.5	31.1	37.8	16.2	1.4	100.0	74	30.6
Reproductive Health Survey, 2003								
Total	**8.3**	**24.3**	**33.0**	**26.1**	**7.8**	**100.0**	**218**	**32.4**
Reproductive Health Survey, 1998								
Total	**10.3**	**26.5**	**33.1**	**20.6**	**9.6**	**100.0**	**136**	**31.5**

The median age of sterilized women increased from 31.5 in 1998 to 32.4 in the year 2003.

Supply of Contraceptives (by source)

Although the family planning service system was created in Mongolia 10 years ago, this system requires further strengthening. Therefore, in order to conduct an analysis related to the current family planning service system, two questions were asked to all respondents regarding where they received their contraceptives and how much they had to pay. Table 4.13 presents the data collected from women currently using modern contraceptive methods by most recent source of supply/service and cost.

As compared with 1998 RHS, the percentage of current users who obtained modern contraceptives from public hospitals decreased from 76 percent in 1998 to 64 percent in 2003. The roles of other supply sources slightly increased. For example, family doctors and bagh feldshers became important supplementary sources for the respondents' contraceptive supplies. While 14 percent of women replied that they purchased contraceptives from pharmacies, 12 percent obtained contraceptives from family doctors and 5 percent obtained contraceptives from bagh feldshers.

Table 4.13 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 2003

	Modern method					Total	
	Pills	IUD	Injections	Male, female condom	Female Sterilization	1998	2003
Source of Current Method							
Public Hospital	37.3	76.8	68.0	23.2	96.3	75.8	63.5
Private Hospital	1.3	6.9	1.8	0.0	2.8	3.6	4.4
Pharmacy	32.4	2.7	2.8	53.0	0.0	15.9	13.9
Family Doctor	19.2	9.5	18.1	12.1	0.0	0.0	12.0
Bagh Feldsher	9.1	3.8	9.3	5.3	0.0	-	5.3
Shop	0.0	0.0	0.0	5.1	0.0	0.6	0.6
Friends	0.4	0.2	0.0	1.1	0.0	2.6	0.3
Parents/Relativ	0.1	0.1	0.0	0.0	0.0	1.0	0.1
Other	0.3	0.0	0.0	0.2	0.0	0.6	0.1
Cost							
Purchase	35.7	10.6	4.5	57.7	0.9	29.1	19.6
Service Fee	0.4	13.0	4.0	0.4	21.6	16.6	8.9
No Fee	63.9	76.4	91.4	41.9	77.5	54.3	71.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number of women	781	2,320	397	470	218	2,493	4,216

- data are not available

According to the RHS 1998, all sterilized women underwent the operation in public hospitals. According to the RHS 2003, 96 percent of women received the operation in public hospitals and 3 percent in private hospitals.

Seventy two percent of women using any modern contraceptive obtained them without fee or expenditure, when compared to 54 percent with no fee in 1998, an increase of 17 points. According to the RHS 2003, 20 percent who had purchased their contraceptives, (58 percent) spent some money buying condoms and 36 percent purchased oral contraceptive pills. The percentage of women buying pills decreased by 17 points as compared with 1998 level (53 percent). Most women did not spend money on hormonal injections (91percent) and IUDs (76 percent) as shown in Table 4.13.

Intentions to Use Family Planning in the Future

Table 4.14 shows the percentage distribution of currently married women who were not currently using any contraceptive method, but who intended to use in the future depending on the number of living children.

Table 4.14 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, 2003

Intention	Number of Living Children					All Women		Husbands	
	0	1	2	3	4+	1998	2003	1998	2003
Never Used Contraception									
Intends to Use	19.7	25.2	8.4	6.0	3.4	19.8	11.2	31.3	7.4
Does Not Intend	37.1	12.6	9.0	9.9	12.1	17.7	12.7	36.0	14.2
Unsure about Use	8.3	1.8	1.2	1.5	2.2	2.0	2.1	6.4	2.7
Previously Used Contraception									
Intends to Use									
Does Not Intend	10.6	39.3	57.4	47.0	25.0	37.5	39.3	14.2	39.9
Unsure about Use	24.2	20.1	22.9	34.4	56.3	21.5	33.7	10.5	30.9
	0.0	1.1	1.0	1.2	0.9	1.5	1.0	1.7	4.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
All Currently Married Non-users									
Intends to Use	30.3	64.5	65.9	65.9	28.4	57.3	50.5	45.5	47.3
Does Not Intend	61.4	32.7	31.9	31.9	68.5	39.2	46.4	46.5	45.1
Unsure about Use	8.3	2.9	2.2	2.2	3.1	3.5	3.1	8.0	7.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	132	453	498	334	552	1,965	1,969	787	1,329

The percentage of currently married women who were not currently using any contraceptive, but who intended to use contraceptives in the future dropped from 57 percent in 1998 to 51 percent. Of these non-users who intended to use in the future, 39 percent had previously used and 11 percent had never used contraception.

As seen in Table 4.14 in the RHS 2003 and in Table 4.11 in the RHS 1998, the percentage of currently married women with 1-3 children who had never used any contraceptive before and who had intended to use contraceptives in the future decreased substantially from the level recorded five years ago. Further investigation of such decline would be important for population and RH policies and programs.

On the other hand, the percentage of currently married husbands who were not currently using contraceptives and who intended to use contraceptives in the future (47 percent) remained almost at the same level as it was in RHS 1998 (46 percent). The intentions of women and men to use family planning in the future appear similar.

Reasons for not Intending to Use Contraceptives in the Future

The women who are currently not using any contraceptive method, and who had no intention of using contraceptives in the future, were asked why. While 32 percent of the women responded that they were in menopause or had a hysterectomy and 20 percent replied that they wanted children, 16 percent named infrequent sex, 9 percent referred to health reasons and further 7 percent claimed fecundity impairment (Table 4.15). The comparison of this data with the RHS 1998 reveals that the percentage of menopause/hysterectomy increased from 19 percent in 1998 to 32 percent in 2003. Also, some changes were observed in the knowledge and awareness of population issues. For example, the percentage of women who stated the reasons such as husband’s resistance, lack of knowledge of contraceptives and regarding places where to obtain contraceptives, or availability decreased to some degree.

Table 4.15 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, 2003

Reasons	Age				Total	
	Under 30		30 and over			
	1998	2003	1998	2003	1998	2003
Not married	-	0.6	-	0.0	-	0.1
FERTILITY- RELATED REASONS						
Not Having Sex	0.6	0.6	0.5	0.4	0.5	0.4
Infrequent Sex	1.2	2.5	14.9	18.8	12.1	16.0
Menopausal/Hysterectomy	2.5	1.3	23.6	38.5	19.2	32.1
Subfecund/Infecund	3.7	2.5	8.5	7.7	7.5	6.8
Postpartum/Breastfeeding	5.0	11.3	0.2	1.2	1.2	3.0
Wants (More) Children	62.1	64.2	12.5	10.5	22.9	19.8
OPPOSITION TO USE						
Respondent Opposed	3.1	2.5	11.0	5.4	9.4	4.9
Husband Opposed	1.2	0.0	1.5	0.9	1.4	0.8
Religious Prohibition	0.0	0.0	0.8	0.1	0.6	0.1
LACK OF KHOWLEDGE						
Knows No Method	3.1	3.1	3.0	1.7	3.0	2.0
Knows No Source	0.6	1.3	0.5	0.0	0.5	0.2
MEDHOD -RELATED REASONS						
Health Concerns	8.1	3.8	11.0	6.0	10.4	5.6
Fear of Side Effects	5.6	4.4	2.6	3.3	3.2	3.5
Lack of Access/Too Far	0.0	0.0	2.0	0.1	1.6	0.1
Cost Too Much	0.0	0.0	0.2	0.1	0.1	0.1
Inconvenient to Use	1.2	0.0	1.6	2.1	1.6	1.8
Interferes with body's	-	0.6	-	0.0	-	0.1
Other	1.9	1.3	5.3	2.8	4.5	2.5
DK	0.0	0.0	0.3	0.3	0.3	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number of Women	161	159	609	755	770	914

- data are not available

When compared with the situation five years ago, women aged 30 years and over stated that menopause/hysterectomy and infrequent sex were reasons for non-use of contraception. The percentage for the 30 years and over age group was still higher than the percentage of those aged 30 years and under. However, the percentage of women who stated “respondent opposed” decreased. Around 76 percent of women aged 30 years and under reported that they did not use contraceptives and did not intend to use contraceptives because they wanted children or because they were breastfeeding.

Contraceptive Methods Wanted by Women Who Are Currently Not Using Contraceptive and Who Have an Intention to Use It

In Table 4.16, nearly 55 percent of currently married women under 30 who were not using any contraceptive method and intended to use contraceptives, and 43 percent of these women aged 30 and over chose to use IUD in the future. As compared with the situation five years ago, the use of IUD was on the decline. The other modern methods, including pills and injection are reportedly becoming more popular and widely used by all women.

Table 4.16 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, 2003

Preferred Method	Age				Total	
	Under 30		30 and over			
	1998	2003	1998	2003	1998	2003
Pills	10.0	18.4	9.5	15.9	9.8	17.4
IUD	65.4	54.5	55.1	42.5	61.5	49.5
Injections	6.8	14.3	9.0	15.7	7.6	14.9
Implant/Norplant	2.1	1.7	2.1	0.5	2.1	1.2
Diaphragm/Foam/Jelly	0.0	0.2	0.2	0.5	0.1	0.3
Male condom	3.1	6.0	2.8	4.3	3.0	5.3
Female condom	-	0.0	-	0.5	-	0.2
Female Sterilization	0.6	0.5	0.7	3.4	0.6	1.7
Periodic Abstinence	9.1	3.1	18.4	15.0	12.6	8.0
Withdrawal	0.1	0.2	0.0	0.5	0.1	0.3
Other	0.3	0.2	0.7	0.0	0.4	0.1
DK	2.4	0.9	1.4	1.2	2.0	1.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number of Women	703	580	423	414	1,126	994

- data are not available

The use of periodic abstinence, a popular traditional method of contraception, declined (as reported by the female respondents). While 13 percent of these women chose periodic abstinence in the 1998 RHS, only 8 percent of these women chose periodic abstinence in the 2003 RHS.

Attitude of Wives and Husbands to Family Planning

Table 4.17 gives a comparative review of opinions of wives and husbands regarding approval of family planning. The percentage of wives and husbands who supported family planning was higher than it was five years ago.

For example, 90 percent of husbands, 96 percent of wives and 87 percent of the total group (husbands and wives combined) approved family planning.

Table 4.17 Percent Distribution of Couples by Approval of Family Planning, Mongolia, 2003

Husband's Attitude	Wife's Attitude			
	Approve	Disapprove	Don't Know	Total
Approve	86.6	2.3	1.2	90.1
Disapprove	5.6	0.2	0.3	6.0
Don't Know	3.5	0.2	0.2	3.9
Reproductive Health Survey, 2003				
Total	**95.7**	**2.7**	**1.6**	**100.0**
Number of husband	-	-	-	4,212
Reproductive Health Survey, 1998				
Total	**92.2**	**5.4**	**2.4**	**100.0**
Number of husband	-	-	-	1,557

Although this proves that men's RH knowledge has improved, more research needs to be undertaken in this area.

Summary and Conclusion

Knowledge and use of family planning of population increases from year to year and the need for modern contraceptives is growing. Since RHS 1998, among all women the use of modern contraceptives increased from 33 percent in 1998 to 45 percent in 2003. More sources of information regarding family planning have been established and male participation in family planning has improved. All of these indicators clearly demonstrate the gradual improvement of access and quality of reproductive health services in Mongolia.

The findings indicate that current use of contraception is highest in rural areas (instead of urban areas as in 1998) among women with "incomplete and complete secondary education", and among mothers of parity 2 and above. Such prevalence of use among these various sub-groups will have an impact on fertility and reproductive health. Thus, difference in knowledge and use of contraceptives across age groups, regions, and educational levels requires that information on family planning and reproductive health services are to be delivered in a timely manner, based on the needs of target groups.

The probability that the use of contraceptives will increase in the future is highly plausible. This is due partly to the high increase in approval by wives (96 percent), husbands (90 percent), married couples (jointly 87 percent) and half of married women (who were not using contraception) intend to use contraception in the future.

As reliable and objective information is extremely important for resolving the issues reflected in the National Program on Reproductive Health, more in-depth research would be needed on some issues and challenges mentioned in this chapter.

CHAPTER V

OTHER PROXIMATE DETERMINANTS OF FERTILITY

Solongo Algaa and Khishigee Seded

Chapter 3 revealed that fertility levels varied according to background variables or conditions such as age of women, educational level, region and residence. However, these variables only affected fertility indirectly through important or intermediate "proximate" determinants of fertility. These determinates included marital status, sexual intercourse, postpartum amenorrhea, postpartum abstinence, postpartum insusceptibility, the onset of menopause, use of contraception and induced abortion. This chapter will discuss the situation of more direct measures of a woman's risk of becoming pregnant, including proximate determinants of fertility such as the marital status of women, age during first marriage, sexual activity of women, postpartum amenorrhea, postpartum abstinence, postpartum insusceptibility, contraceptive use and menopause. In addition, some findings will be reviewed in comparison with the findings of RHS 1998.

Marital Status

Among women aged 15 to 49 years, 25 percent were never married, 62 percent were currently married, 6 percent were living together with partners (cohabiting), and 7 percent were widowed, divorced or separated. The pattern of the marital status of women according to age is shown in Table 5.01.

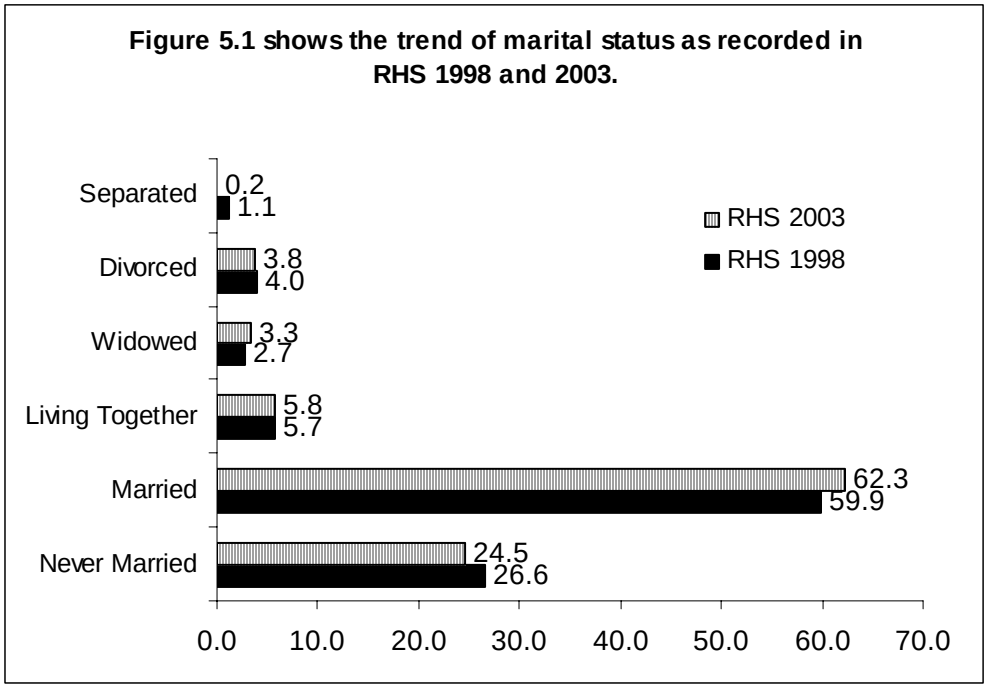
Table 5.01 Percent Distribution of women by current Marital Status according to age, Mongolia, 2003

Age group	Current marital status						Total	Number of Women
	Never married	Married	Living together	Widowed	Divorced	Not Living Together		
15-19	94.1	3.3	2.4	0	0.1	0	100	1,347
20-24	41.3	41.1	15.2	0.6	1.7	0	100	1,420
25-29	14.6	71.7	9.1	0.9	3.5	0.1	100	1,509
30-34	6.7	82	4.7	1.4	5	0.3	100	1,520
35-39	3	84.5	3.2	3.6	5.2	0.6	100	1,428
40-44	2.6	81.2	2.2	8.1	5.7	0.2	100	1,276
45-49	3.6	74.3	1.4	14	6.6	0.1	100	814
Total	**24.5**	**62.3**	**5.8**	**3.3**	**3.8**	**0.2**	**100**	**9,314**

About 94 percent of young women aged 15-19 and 41 percent of women aged 20-24 had never married; this figure abruptly decreased to 15 percent of women aged 25-29. When compared with the RHS 1998 (NSO, UNFPA, 1999), the proportion of never married women increased for all younger age groups mentioned above. This suggested that women tended to marry at a later age. The percentage of women who were living together (or cohabiting) with a partner slightly increased for all age groups except adolescents, indicating the rising trend of such a form of marriage. Although it was noteworthy that the percentage of women widowed, divorced or separated was low for all age groups, the percentage peaked for older women aged

45-49, with 14 and 7 percent, respectively. This difference in percentages indicated the high mortality rate among older men. The survey findings confirmed that marriage was universal in Mongolia, as is in many developing countries, while divorce and separation were not very common.

Figure 5.1 shows the trend of marital status as recorded in RHS 1998 and 2003.



Source: NSO and UNFPA, 1999. Reproductive Health Survey Report, 1998, Mongolia

Figure 5.1 demonstrates that the trend of marital status of women has been relatively stable over the last five years. The percentage of married women has slightly increased for all women, but the proportion of never married women declined slightly.

Age at First Marriage

Reflecting the process of development, the age at first marriage of women increased as educational, employment and income levels increased, and as the role of women in the society becomes more valued. Table 5.02 shows the percentage changes in age during first marriage of [ever married] Mongolian women.

Women aged 45-49 years were married at an earlier age than their younger counterparts. For example, one third of women aged 45-49 years first married before the age of 20, compared with only 21 percent of those now aged 35-39 years, and 27 percent of women now aged 25-29.

Women aged 35-39 married a little later than women of other age groups. This group was aged around 20 at a time of the hardest period of transition, which may have been one of the explanations for the delay in marriage.

Table 5.02 Percentage of Women Ever Married by Specific Exact Ages and Median Age at First Marriage, According to Current Age, Mongolia 2003

Variable & Category	Exact Age at First Marriage				Never Married	Number	Median
	18	20	22	25			
Age							
15-19	-	-	-	-	94.1	1,347	-
20-24	8.2	28.2	-	-	41.3	1,420	-
25-29	5.9	26.6	50.7	77.8	14.6	1,509	21.9
30-34	4.7	26.0	57.8	81.0	6.7	1,520	21.4
35-39	4.8	21.0	54.9	84.2	3.0	1,428	21.7
40-44	6.3	25.9	55.0	82.6	2.6	1,276	21.6
45-49	10.3	33.3	58.7	84.4	3.6	814	21.3
Median for Women 25-49	**6.0**	**25.9**	**55.1**	**81.7**	**6.5**	**6,547**	**21.6**

Median age at first marriage was an important indicator because the median age was the age at which 50 percent of women in a particular age group first married. The median age at first marriage reached 21.6 in 2003, an increase of 0.8 points from 20.8 in 1998 (NSO, UNFPA, 1999). This increase demonstrated a slight trend to delay the first marriage until a later age. The younger the age group, the higher the median age tends to be for first time marriage. The last column in Table 5.02 shows that median age at first mattiage increased sligthly over time from 21.3 years for those now 45-49 to 21.9 for those now aged 25-29 (except for ages 30-34). Less than half (37 percent) of young women aged 20-24 years first married at the age of 20, which made calculating the median age difficult at first marriage for women under 25.

With the increase in educational level and labor participation rate of Mongolian women (MOSWL, UNDP, 2003), the median age at first marriage as a demographic phenomenon, also increased for all age groups of women, constituting one of the reasons for the decline in the fertility rate.

Differentials of Median Age at First Marriage

Table 5.03 shows how median age at first marriage among women aged 25-49 varied by residence, region and education level of women.

In terms of residence, the median age at first marriage appeared to be slightly higher for urban women than rural women (22.0 years versus 21.4 years). The largest gap in median age was observed for women age 25-29, with 22.5 in urban areas and 21.5 in rural areas. This gap may be related to the fact that urban women have access to better opportunities for continuing education and employment than rural women.

Regarding regional location, women in Ulaanbaatar and the western region married one year later than women in other regions. The median age at first marriage was higher for women in Ulaanbaatar and in the western region than compared to those in other regions. This finding may be related to the fact that employment opportunities are more plentiful in urban centers and the majority of institutions of higher learning are located in Ulaanbaatar. Similarly, the majority of branch faculties of public and private universities are situated in the western region as opposed to

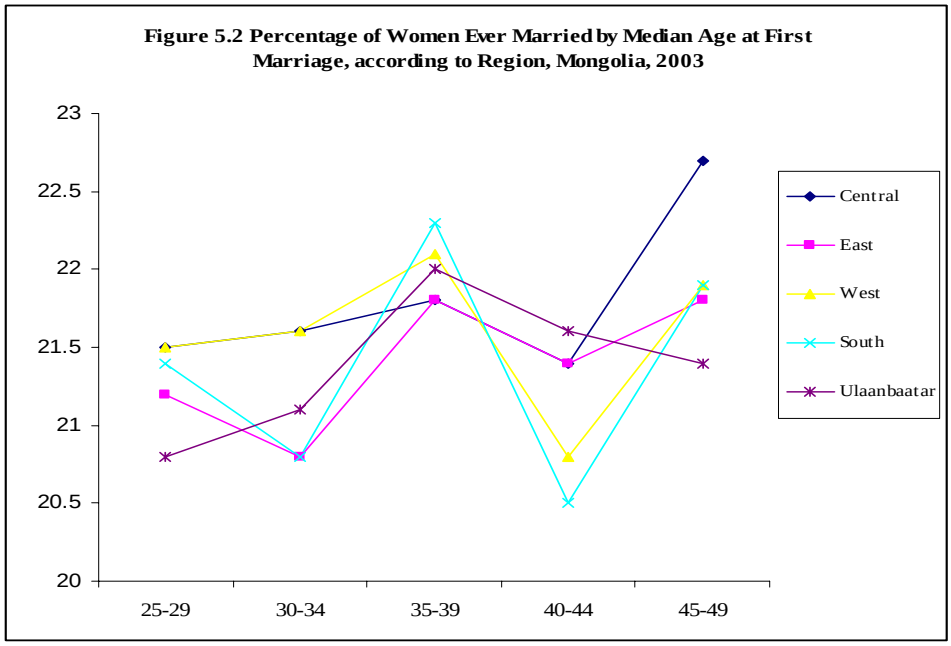
other regions, which may in some way impact the marital status of women in the western region. The variations in age at first marriage by region is shown in Figure 5.2.

Table 5.03 Median Age at First Marriage Among Women Age 25-29 years, by Current Age and Selected Background Characteristics, Mongolia, 2003

Background Characteristics	Age 5 – Year Groups					Median for women age
	25-29	30-34	35-39	40-44	45-49	**25-49**
Residence						
Urban	22.5	21.7	21.9	21.8	21.4	22
Rural	21.5	21.2	21.4	21.4	21.2	21.4
Region						
Central	21.5	21.2	21.5	21.4	20.8	21.3
East	21.6	20.8	21.6	20.8	21.1	21.1
West	21.8	21.8	22.1	22.3	22	22
South	21.4	21.4	20.8	20.5	21.6	21
Ulaanbaatar	22.7	21.8	21.9	21.9	21.4	22.1
Highest Education Level						
Primary or less	21.3	21.2	21.7	20.3	19.6	20.7
Incompleted secondary	21.1	20.9	20.8	20.7	20.3	20.9
Complete secondary	21.8	21.4	21.8	21.8	21.5	21.8
More than secondary	22.8	21.6	21.9	22.1	21.9	22.1
Total	**21.9**	**21.4**	**21.7**	**21.6**	**21.3**	**21.6**

Median age at first marriage increased slightly with an increase in educational level of women aged 20.7 years with a primary educational level to women aged 22.1 years with a secondary educational level and higher. There was an one year decrease between women with a primary educational level and with a secondary educational level and higher.

Figure 5.2 Percentage of Women Ever Married by Median Age at First Marriage, according to Region, Mongolia, 2003



Age of First Sexual Intercourse

An important factor to consider when studying fertility is the age of first sexual intercourse among women. RHS respondents were asked at what age they first had sexual intercourse. Table 5.04 presents this information indicating median age at first intercourse. In Table 5.04, at age 15, less than 1 percent of women reported having experienced sexual intercourse; by age 18, this figure increased to 14 percent; and by age 20 the percentage increased tp almost one in two (Table 5.04). The median age of first sexual intercourse for Mongolian women was 20. This figure indicates that 50 percent of women aged 25-49 reported having experienced their first sexual intercourse by age 20.

The median age at first intercourse remained around 20.0 years between the oldest age cohort and cohort age 25-29.

Table 5.04 Percentage of Women Who had First Sexual Intercourse by Exact Age and Age at First Intercourse according to Current Age, Mongolia, 2003

	Exact Age at First Sexual Intercourse						
Current Age	15	18	20	22	25	**Number of Women**	**Median Age at First Intercourse**
15-19	0.7	-	-	-	-	1,347	A
20-24	0.4	17.5	56	-	-	1,420	19.3
25-29	0.6	13.6	48.3	77.4	95.5	1,509	20.0
30-34	0.3	10.3	47	81.3	94.7	1,520	20.1
35-39	0.8	12.4	44.9	80	96.8	1,428	20.2
40-44	0.2	15.4	50.2	80.6	95.7	1,276	20.0
45-49	1.2	25.8	58.1	85.4	97.1	814	19.5
Median for women 25-49	**0.6**	**14.4**	**48.8**	**80.5**	**95.8**	**6,547**	**20**

Note: a=omitted because less than 50 percent with age group 15-19 had had intercourse by age 15.

Sexual Activity of Currently Married Women

Without using contraception, the chance of pregnancy was related to frequency of sexual intercourse. Married women were asked a question about the date of last sexual intercourse. A woman was defined as being sexually active if she last had sexual intercourse at any time in the 4 weeks preceding the date of interview. Table 5.05 shows that over 87 percent of married women were sexually active in the 4 weeks preceding the survey, 2 percent were postpartum abstaining, and 11 percent were not sexually active for reasons other than a recent birth. When observing the various age groups, sexual activity was most intensive at ages 25-39 (90-92 percent), against the age groups of 15-19 and 45-49 (72-75 percent). Figure 5.3 reveals that sexual activity of married women aged 15-19 decreased by 8 points as compared with RHS 1998 (75 percent versus 83 percent), while for other groups the sexual activity did not differ for RHS 1998 and 2003.

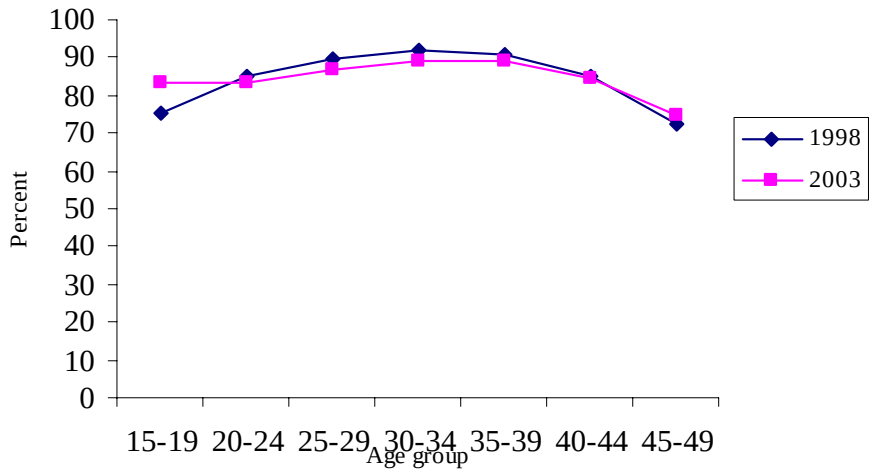
About 17 percent of women aged 15-19 years, 5 percent of women aged 20-24 years and only 1 percent of women of aged 30-34 years had not had sex for two years after most recent birth. Over 13 percent of married women aged 40-44 and 27 percent of married women aged 45-49 were abstaining from sexual intercourse for reasons

other than a recent birth. These percentages demonstrated that sexual activity was directly correlated with age. Overall, the percentage of all women abstaining from sexual activity for over two years was very small.

Table 5.05 Percent Distribution of Current Married Women by Sexual Activity in 4 weeks Prior to the Survey and Duration of Abstinence by Whether or Not Postpartum, according to Background Characteristics, Mongolia, 2003

Background Characteristics	Active Last 4 weeks	Not Sexually Active in Last 4 weeks				Total	Number
		Postpartum abstinence		No postpartum			
		0-1 Year	2+ Years	0-1 Year	2+ Years		
Age group							
15-19	75.3	16.9	0	7.8	0	100	77
20-24	85	5	0	10	0	100	800
25-29	89.8	2.8	0	7.4	0.1	100	1,220
30-34	91.9	1.1	0.1	6.8	0.2	100	1,317
35-39	90.6	1.4	0.2	7.9	0	100	1,251
40-44	85.2	0.4	0.1	13.8	0.6	100	1,064
45-49	72.4	0	0	26.9	0.6	100	616
Marital Duration							
0-4	85	6.1	0	8.8	0.2	100	1,205
5-9	90.9	1.6	0.1	7.3	0.1	100	1,222
10-14	91.5	1.1	0.1	7.3	0	100	1,405
15-19	89.9	0.9	0.2	8.8	0.3	100	1,137
20-24	84.4	0.2	0	15	0.4	100	854
25-29	72.8	0.2	0	26.3	0.7	100	445
30+	51.9	0	0	45.5	2.6	100	77
Residence							
Urban	86.6	1.8	0.1	11.2	0.3	100	3,135
Rural	87.6	2.1	0	10.2	0.1	100	3,210
Region							
Central	87.2	1.9	0	10.7	0.1	100	2,169
East	87.5	1.8	0	10.7	0	100	614
West	88.1	1.8	0.1	9.8	0.2	100	1,351
South	85.4	2.6	0	12	0	100	418
Ulaanbaatar	86.6	1.9	0.2	10.9	0.5	100	1,793
Highest Education Level							
Primary or less	80.2	3.1	0	16.5	0.2	100	510
Incompleted secondary	85.6	2.7	0	11.4	0.2	100	1,386
Complete secondary	89.1	2	0.1	8.6	0.3	100	1,740
More than secondary	87.9	1.2	0.1	10.6	0.2	100	2,709
Contraceptive Method							
No Method	74.5	5.5	0.1	19.3	0.7	100	1,969
Pill	95.3	0.3	0	4.5	0	100	696
IUD	92.4	0.2	0	7.3	0	100	2,080
Sterilization	87.4	2.1	0	10.5	0	100	190
Periodic Abstinence	92.7	0.2	0.2	7	0	100	631
Other	93.2	0.3	0.1	6.4	0	100	779
Total	**87.1**	**1.9**	**0.1**	**10.7**	**0.2**	**100**	**6,345**
RHS, 1998	**86.1**	**3,6**	**0.5**	**9.7**	**0.2**	**100**	**4,899**

Figure 5.3 Percent Distribution of Current Married Women by Sexual Activity, Mongolia, 1998 and 2003



With respect to duration of marriage and sexual activity, women married for 5-14 years were the most sexually active (90-91 percent) while approximately half of women (52 percent) married for over 30 years had sexual intercourse in the four weeks preceding the survey. Among the latter cohort, 46 were abstaining for two years from sexual intercourse for reasons other than recent birth. The percentages demonstrate that sexual activity tended to decrease with increased in marital duration. There was not much difference in sexual activity for urban and rural areas, and among regions over 80 percent of women with a primary educational level and 88 percent of women with a higher educational level were sexually active, showing a small increase. Sexual abstinence for up to two years for reasons other than a recent birth was more common for women with a primary educational level (17 percent). Sexual activity of currently married women varies with contraceptive methods. About 75 percent of women not using any contraceptive method had sexual intercourse recently while well over 90 percent of women who used modern contraceptive methods were sexually active. However, of concern was that about 75 percent of women not using any contraception and about 93 percent of women, who reported using periodic abstinence as primary contraceptive method, were sexually active. Among women not using any contraceptive method, only 6 percent were abstaining from sexual intercourse for up to two years after recent birth and 19 percent were abstaining from sexual intercourse for reasons not related to a recent birth. It could be said therefore, that women not using any contraceptive were more likely to abstain from sexual intercourse than women who reported using contraceptives.

Postpartum Amenorrhea, Abstinence and Insusceptibility

Postpartum amenorrhea and postpartum abstinence are two main proximate determinants of fertility that affect women's pregnancy soon after giving birth. Postpartum amenorrhea refers to the period between childbirth and the return of menstruation. The risk of pregnancy is reduced during this period. Women cannot conceive if they are abstaining from sex after childbirth (postpartum abstinence). Women are considered insusceptible (not exposed) to risk of pregnancy, if they are either amenorrneic or abstaining (or both). Table 5.06 shows the percentage of births for which mothers were postpartum amenorrheic, abstianing or who were

insusceptible since birth. The percentage of women in amenorrhea for up to 36 months was 27 percent, those abstaining was 15 percent, and women who were insusceptible was 32 percent. As compared with the findings of RHS 1998, these figures were lower by 1-2 points. In the survey sample, 98 percent of women were amenorrheic within the first two months after delivery, 85 percent were abstaining and 100 percent were insusceptible. The percentage of women who were insusceptible decreased rapidly with increased duration since birth, reaching 24 percent at 12-13 months, and 13 percent at 24-25 months.

Table 5.06 Percentage of Birth in the Three Years Preceding the Survey for which Mothe Postpertum Amenorrheic, Abstaining and Insusceptible, by Number of Month and Median and Mean Duration and Summary Information for RHS 1998, M

Variable & Category	Postpartum			Number of Birth
	Amenorrheic	Abstaining	Insusceptible	
Months Since Birth				
<2	97.9	85.4	100	48
2-3	81.9	41.5	84	94
4-5	61.7	21.3	64.9	94
6-7	50.6	15.2	58.2	79
8-9	36.3	8.8	40.7	91
10-11	31.4	10	37.1	70
12-13	17.3	8.6	23.5	81
14-15	18.5	12.3	23.5	81
16-17	15.3	10.6	21.2	85
18-19	7.8	9.1	14.3	77
20-21	9	4.5	10.4	67
22-23	4.6	7.7	9.2	65
24-25	4.3	11.6	13	69
26-27	6.5	8.7	14.1	92
28-29	9.9	4.9	12.3	81
30-31	8.4	6	10.8	83
32-33	11.8	14.7	22.1	68
34-35	13.8	8	17.2	87
Total	**26.8**	**14.9**	**31.7**	**1 412**
Median	6.5	2.2	7.5	-
Mean	10	6.1	11.8	-
Prev/Incidence Mean	9.5	5.3	11.3	-
RHS, 1998	**28.6**	**16.1**	**34.1**	-

In Table 5.06, the median duration of postpartum amenorrhea is 6.5 months; the mean duration is 10.0 months. The duration of postpartum amenorrhea seems to be rather long for Mongolian women, most probably due to long duration of breastfeeding. Postpartum amenorrhea normally lasts for about 2-3 months, in the absence of breastfeeding. The fact that for over 50 percent of births, mothers were in postpartum amenorrhea within 6-7 months since giving birth, and for 58 percent of births, mothers were insusceptible. This implies that amenorrhea was most probably one of the main reasons for women not to get pregnant.

The median duration of abstinence was 2.2 months and the mean was 6.1 months. The median duration of insusceptibility was 7.5 months and the mean was 11.8 months.

Prevalence was defined as the number of children whose mothers were experiencing amenorrhea (abstinent and insusceptible) at the time of the survey. Incidence was defined as the average number of births per month. An estimate of the mean was obtained by dividing the number of mothers who were amenorrheic (abstinent and insusceptible) at the time of the survey by the average number of births per month. The prevalence/incidence mean for amenorrhea was 9.5 months, abstinence was 5.3 months and insusceptibility was 11.3 months.

Median Duration of Insusceptibility

Table 5.07 shows the median duration of amenorrhea, abstinence and insusceptibility by age, residence, region and educational level.

Table 5.07 Median Number of Months of Postpartum Amenorrhea, Postpartum Abstinence, and Postpartum Insusceptiblity, by Selected Background Charateristics, Mongolia, 2003

Background Charateristics	Postpartum			Number of Births
	Amenorrheic	Abstaining	Insusceptible	
Age				
<30	6.5	2.4	8.1	937
30+	6.5	1.3	6.5	475
Residence				
Urban	6.8	1.9	7.4	701
Rural	6.2	2.5	7.7	711
Region				
Central	6.1	2.3	7.6	478
East	9.1	3.2	10.1	151
West	6.1	1.8	6.5	264
South	4.3	2.4	5.6	105
Ulaanbaatar	6.9	2	7.5	414
Highest Educational Level				
Primary or less	6.3	2.9	9.5	159
Incompleted secondary	6.7	2.1	7.5	334
Complete secondary	8.8	2.2	9.9	429
More than secondary	5.8	2.1	6	490
Total	**6.5**	**2.2**	**7.5**	**1,412**

As seen from the table above, for women aged 30 years and under and for women aged 30 years and older, the median duration of amenorrhea was same as the overall median of 6.5 months. However, the RHS 1998 indicated that the duration of amenorrhea of women aged 30 and older was 9.1 months, which was 2.6 months longer than it was in 2003. The duration of abstinence for women aged 30 years and under was 2.4 months, for women aged 30 years and older was 1.3 months as opposed to 8.8 months and 6.5 months of insusceptibility for the two age groups, respectively (Table 5.07).

When accounting for residence, the duration of amenorrhea was slightly higher among urban women (6.8 months) when compared to rural women (6.2 months). The duration of abstinence was 0.6 months longer for rural women (2.5) when compared to urban women (1.9). Median duration of amenorrhea, abstinence and insusceptibility were longer in the Eastern regions than in other regions. However, longer median durations were found in the Western regions in RHS 1998. The regions may have impacted the aforementioned indicators. For women with an educational level higher than secondary school, the median duration was 5.8 months for amenorrhea, 2.1 months for abstinence, and 6.0 months for insusceptibility. However, these indicators were relatively short when compared with women with primary, incomplete and complete secondary education.

Menopause

The age at onset of menopause varies between women because of different factors including age of women, health, lifestyle, nutrition, age at first and last birth, and the total number of births they have experienced. The younger the age of the women during the onset of menopause, the greater its effect not only on fertility rate, but also on the mental health of the individuals.

Table 5.08 Menopause for women 30-49 Years of Age, by age group, Mongolia, 2003

Age group	Exposure	Number of Women
	Menopause %	
Age		
30-34	1.1	1,317
35-39	2.8	1,251
40-41	4.4	433
42-43	7.4	446
44-45	13.6	330
46-47	26.2	290
48-49	50.8	181
Total	**7.4**	**4,248**
RHS, 1998	**5.1**	**3,494**

As shown Table 5.08, the percentage of women in menopause increased with age, rising from 1 percent among women aged 30-34 years to 51 percent among women aged 48-49 years. This means slightly over half of Mongolian women who reach the age of 50 years have already experienced menopause. As compared with RHS 1998, the percentage of women in menopause has increased by 1.5 points (49.3 percent). Mongolian women experience menopausal onset relatively early when compared to other developing countries with high fertility rates. The decline in fertility is related to lack of nutrition of women and possibly work stress.

Summary and Conclusion

In this chapter some of the proximate determinants of fertility, other than contraception and abortion, have been examined. It has been shown that marriage was still nearly universal. The median age at marriage of women was relatively young: about 21.6 years. The median age at marriage increased for all women of reproductive age, when compared with the results obtained five years ago. The median age at first sexual intercourse remained around 20.0 years between the oldest age group (45-49) and the youngest (25-29).

The duration of postpartum amenorrhea seems to be rather lengthy (median of 6.5 months and mean of 10.0 months), for Mongolia women, due in part to extended breastfeeding.

The median duration of postpartum insusceptibility was 7.5 months. The median duration of postpartum insusceptibility was higher among mothers aged 30 years and younger, mothers in Western region, and mothers who had completed their secondary education when compared to their counterparts.

These proximate determinants, other than contraception and abortion, were discussed as they determined the length and pace of reproductive activity and were important in understanding fertility behavior and changes.

CHAPTER VI

FERTILITY PREFERENCES

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This chapter consists of sections which assess for desired family size, the need for contraception, ideal family size and unwanted fertility. In particular, these sections include the indicators that are necessary for assesment and evaluation of the National Reproductive Health Program, such as married women's preferences for future childbearing, preferred timing for a future birth, fertility preferences in relation to contraceptive use, ideal number of children, wanted and unwanted fertility, and avoidance of unwanted pregnancies.

Desired number of Children

Table 6.01 shows the percent distribution of currently married women by desire for children according to number of living children (including current pregnancy).

Table 6.01 Percent Distribution of Currently Married Women by Desire for more Children, According to Number of Living Children, Mongolia 2003

Desire For More Children	Living Children (Including Current Pregnancy)							
	0	1	2	3	4	5	6+	Total
Wants Another Soon	69.4	33.5	10.4	4.5	1.4	0.5	0.3	13.1
Wants Another Later	15.6	44.4	14.0	3.3	0.7	0.2	0.0	14.5
Wants, Unsure Timing	1.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Undecided	0.5	4.1	6.4	1.3	0.4	0.2	0.0	3.2
Wants No More	4.8	15.8	65.1	85.1	88.3	86.6	83.5	63.2
Sterilized	1.1	1.0	2.5	3.9	4.5	4.7	4.8	3.0
Declared Infecund	6.5	0.9	1.5	1.8	4.7	7.8	11.4	2.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	186	1,256	1,997	1,319	830	424	333	6,345

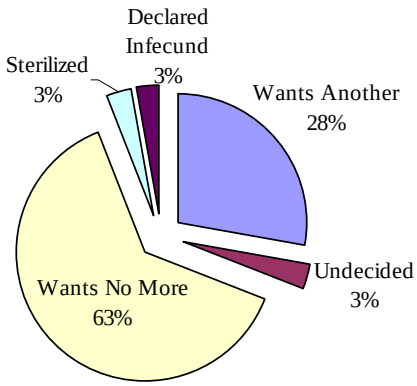
Note:"Soon" means within 2 years; "Later" means to delay 2 or more years.

The survey question for currently pregnant women regarding desire for more children was introduced with the phrase "After the child you are expecting ...", Therefore, if a woman had two children and currently pregnant, she was classified as having 3 children.

According to RHS 1998, 15 percent of currently married women wanted to have a child within two years ("soon"), another 15 percent of them wanted to delay their next birth for two or more years ("later"), while 62 percent wanted no more children. In RHS 2003 findings, 13 percent of currently married women wanted to have a child within two years, 14 percent of them wanted to delay their next birth for two or more years, while 63 percent wanted no more children. Thus, the comparison

of the two suveys revealed that there was little change in the proportion of currently married women wanting to have a child within two years, those wanting to have a child in more than two years and those who do not want more children.

Figure 6.1 Percent Distribution of Currently Married Women by Desire for Children, Mongolia 2003



The percentage of women who desired to have a child within two years and those who preferred to have a child within more than two years declined with the increase in number of living children., 69 percent among women with no children to less than 1 percent among women with 5 or more children. On the other hand, the percentage of women who did not want more children increased sharply with the increase in the number of living children, from 5 percent among women without children to over 85 percent among women with 3 or more children. While the RHS 1998 registered that 58 percent of women with two children and 80 percent of women with three children did not want to have any more children, the RHS 2003 revealed that 65 percent of women with two children and 85 percent of women with three children did not want anymore children. Thus, there was an increase of 7 points in the percentage of women with two children not wanting more children and an increase of 5 points in the percentage of women with three children not wanting more children as compared with RHS 1998 findings. This increase demonstrated that Mongolian women consciously chose 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.

Table 6.02 Percent Distribution of Currently Married Women by Desire for Children, According to Age, Mongolia 2003

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	18.2	23.1	24.2	17.6	7.4	1.0	0.5	13.1
Wants Another Later	63.6	49.3	27.2	9.9	0.8	0.2	0.0	14.5
Wants, Unsure Timing	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1
Undecided	3.9	4.6	5.3	5.2	1.9	0.3	0.0	3.2
Wants No More	13.0	21.9	41.1	63.9	83.8	89.8	77.6	63.2
Sterilized	1.3	0.1	1.6	2.7	5.1	4.7	3.1	3.0
Declared Infecund	0.0	0.5	0.5	0.5	1.0	3.9	18.8	2.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Number	77	800	1,220	1,317	1,251	1,064	616	6,345

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

With rising age, the proportion of married women who wanted more children declined from about 72 percent among currently married women aged 20-24, to 8 percent among currently married women aged 35-39. In contrast, the proportion who did not want any more children increased with age, from 22 percent of currently married women aged 20-24, to 84 percent of currently married women aged 35-39. When compared with RHS 1998, the overall proportion of currently married women who wanted more children declined slightly from 31 percent in 1998 to 28 percent in 2003, while the proportion of women who did not want any more children increased slightly from 62 percent in 1998 to 63 percent in 2003. However, for each age group among women (15-49), the percentage of currently married women who desired more children increased as compared with RHS 1998, while the percentage of those who did not want more children decreased.

Table 6.03 presents the percentage of currently married women did not want any more children, by number of living children, region, residence, and educational level.

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 2003

Background Characteristics	Living Children (Including Current Pregnancy)							
	0	1	2	3	4	5	6+	Total
Residence								
Urban	3.3	17.3	69.6	89.7	91.8	91.1	84.0	63.6
Rural	*	16.3	65.3	88.5	93.4	91.3	90.3	68.8
Region								
Central	11.3	16.9	68.7	92.2	95.4	91.7	86.0	68.6
East	*	14.8	68.3	90.7	88.6	85.5	80.0	64.7
West	6.8	16.2	63.6	83.4	92.4	93.8	96.7	69.9
South	*	15.7	63.4	90.7	96.0	97.3	96.9	68.7
Ulaanbaatar	1.8	17.9	69.6	88.7	89.5	87.5	81.7	60.5
Highest Education Level								
Primary or Less	*	20.7	61.7	90.1	87.5	93.0	84.9	63.1
Incomplete Secondary	4.9	16.8	64.9	88.3	92.7	89.2	87.7	67.0
Complete Secondary	2.0	14.5	66.8	86.9	91.3	93.0	100.0	62.4
More than Secondary	6.2	17.9	70.1	90.5	94.4	91.2	84.2	68.8
Total	**5.9**	**16.9**	**67.7**	**89.1**	**92.8**	**91.3**	**88.3**	**66.2**

*Percentage based on fewer than 25 cases.

Around 66 percent of currently married women expressed not wanting more children (this included women who had been sterilized). The percentage of women with two children who do not want more children was 4 points higher in urban areas than in rural areas. The gap between urban and rural areas in the percentage of women who did not want more children decreased from the 1998 (RHS) to the 2003 (RHS) for each parity (living children 1 to 6 +). Furthermore, the percentage of rural women with two or three children who did not want more children increased by 10 points as compared with the same indicator of RHS 1998. This finding conveyed that rural

women with two or three children were more likely not to have more children. The proportion of women with two children, who do not want more children, in the Southern and the Western regions and women with three children, who do not want more children, in the Western region were lower than those in other regions. This finding indicated that women in the Western and the Southern regions wanted children more than women in other regions. There were small variations within the group of women who expressed a desire not to have any more children according to the educational level of women and number of living children.

Need for Family Planning

Table 6.04 shows the percentage of currently married women with unmet needs, met needs and total demand for family planning by age, region, residence, and educational level. The total demand for family planning was the sum of those women who needed to use family planning, but who were not using it for some reason (for example, because of an unmet need) and women who were using family planning (for example, because needs were being met). Women with an unmet need consisted mainly of women who said that they did not want more children and those who wanted to wait at least two years for another child, but who were not using a contraceptive method. This group also included pregnant women whose current pregnancy was not wanted or mistimed, amenorrheic and those whose last birth was mistimed or not wanted.

As shown in Table 6.04, only 5 percent of currently married women were not using any family planning method, but expressed a need to do so (married women with an unmet need for family planning). The percentage vairiance was minimal when looking at place of residence and region of currently married women with an unmet need. However, the proportion of women with an unmet need decreased considerably with the increasing age of women, from 13 percent among women aged 15-19 to less than 1 percent among women aged 45-49. Similarly, the percentage of women with an unmet need declined moderately with the increasing educational level of women (from 6 percent to 3 percent). As compared with the findings of the 1998 RHS, a sizeable proportion of various age groups and educational groups with unmet need decreased. This variance conveys that substantial progress has been made in family planning counseling and services, especially to less educated women, women aged 25-49 years and women living in Ulaanbaatar during the five years between the two surveys.

About 69 percent of currently married women were currently using some kind of family planning method. In particular, the proportion of women currently using contraceptives was equally high in 3 regions, Ulaanbaatar, the Central and the Eastern regions (69-70 percent), while it is lower in the Western region (66 percent) and higher in the Southern region (72 percent). The current use of contraceptives increased with the increase in educational level (from 56 percent among women with a primary education to 72 percent among women with more a secondary educational level or higher). Furthermore, the current use of family planning increased with age, from age 15-19 (30 percent) to age 35-39 (82 percent), and then declined from age 35-39 to age 45-49 (39 percent).

Table 6.04 Percentage of Currently Married Women with Unmet Need, Met Need, and Total Demand for Family Planning Services by Background Characteristics, Mongolia 2003

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	11.7	1.3	13.0	24.7	5.2	29.9	36.4	6.5	42.9	69.7	77
20-24	7.3	2.4	9.6	45.9	12.4	58.3	53.1	14.8	67.9	85.8	800
25-29	3.4	3.8	7.2	38.9	30.0	68.9	42.4	33.8	76.1	90.5	1,220
30-34	0.9	3.1	4.0	24.2	53.5	77.8	25.1	56.6	81.8	95.1	1,317
35-39	0.6	2.6	3.2	5.8	75.9	81.8	6.4	78.6	85.0	96.2	1,251
40-44	0.1	1.8	1.9	0.8	70.2	71.0	0.8	72.0	72.8	97.4	1,064
45-49	0.0	0.6	0.6	0.2	38.6	38.8	0.2	39.3	39.4	98.4	616
Residence											
Urban	2.0	2.3	4.3	22.4	46.9	69.3	24.4	49.3	73.6	94.2	3,135
Rural	2.1	2.8	4.9	17.4	51.0	68.5	19.5	53.8	73.4	93.3	3,210
Region											
Central	2.1	2.7	4.8	19.0	51.0	70.0	21.1	53.7	74.8	93.5	2,169
East	1.8	2.8	4.6	18.4	51.0	69.4	20.2	53.7	73.9	93.8	614
West	1.5	2.7	4.2	16.2	50.0	66.2	17.7	52.7	70.4	94.0	1,351
South	2.2	3.6	5.7	20.8	51.2	72.0	23.0	54.8	77.8	92.6	418
Ulaanbaatar	2.4	2.0	4.4	24.0	44.7	68.7	26.4	46.6	73.1	94.0	1,793
Highest Education Level											
Primary or Less	3.3	2.9	6.3	16.5	39.4	55.9	19.8	42.4	62.2	89.9	510
Incomplete Secondary	1.9	3.6	5.6	17.2	46.1	63.3	19.2	49.7	68.9	91.9	1,386
Complete Secondary	2.5	2.6	5.2	23.7	48.1	71.8	26.3	50.7	77.0	93.3	1,740
More than Secondary	1.5	1.9	3.4	19.4	52.9	72.3	20.9	54.8	75.7	95.5	2,709
Total	**2.0**	**2.6**	**4.6**	**19.9**	**49.0**	**68.9**	**21.9**	**51.6**	**73.5**	**93.7**	**6,345**

While 49 percent of currently married women using a family planning method used it because they did not want any more children (limiters), 20 percent of the women used it to delay the next birth.The percentage of total family planning demand satisfied (or percent age of women who were using family planning in relation to total family planning demand) was commendably high (94 percent).

This percentage was equally high for urban and rural women, but did not vary substantially by region. However, the percentage was lowest (70 percent) for women between the ages of 15 and 19. The percentage of demand satisfied increased slightly with increase in educational level. Although the percentage of demand satisfied for less educated women was the least (90 percent), it was still high when compared with other developing countries. When compared with the 1998 RHS, the percentage of married women with an unmet need decreased from 10 percent in 1998 to 5 percent in 2003, while those with a met need (current use) increased from 60 percent in 1998 to 69 percent in 2003. The proportion of family planning demand satisfied rose from 86 percent 1998 to 94 percent in 2003.

Ideal Number of Children

This survey attempted to measure women's "ideal" fertility based on the answers to the following questions. Women with living children were asked "If you could go back to the time when you did not have children and could choose exactly the number of children that you wanted to have, how many would that be?", while 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?".

Table 6.05 shows the percent distribution of all women by ideal number of children according to the number of living children. It also presents the mean ideal number of children for all women, for married women, and for husbands.

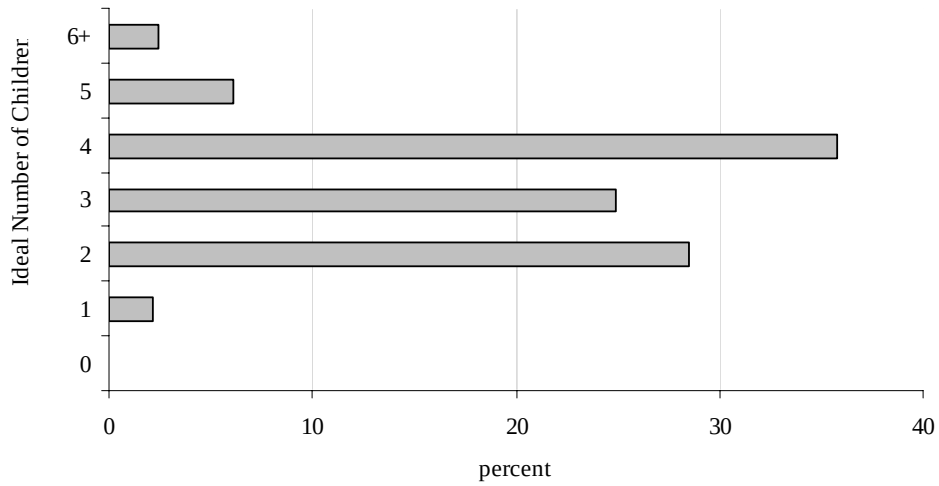
In table 6.05, around 36 percent of women considered four children as the "ideal" number of children to have, while 29 and 25 percent considered two and three children as "ideal." (see Table 6.05 and Figure 6.2). It was evident that as parity rose, so did the mean "ideal" number of children. For example, the mean "ideal" number of children increased from 2.7 for women without living children to 4.4 for women with six and more living children. These indicators were almost the same as those from the the RHS 1998 findings.

A positive correlation between actual and ideal number of children may be explained for the following reasons. On one hand, the women wanting to have many children tended to actually have many children because they implemented their preferences wherever possible. On the other hand, when women stated the "ideal" number of children, they tended to relate to the actual number of children they had. This is known as " rationalization". Women with many children tended to be older than women with fewer children and thus, had larger ideal sizes in mind because of the attitudes that they had formed many years ago.

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 2003

Background Characteristics	Living Children (Including Current Pregnancy)							
	0	1	2	3	4	5	6+	Total
Ideal Number of Children								
0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1
1	5.1	4.2	0.6	0.6	0.2	0.8	0.0	2.2
2	46.2	40.9	28.3	9.8	10.8	13.0	10.4	28.5
3	26.8	30.2	24.9	31.7	9.2	17.0	12.7	24.9
4	17.1	21.2	42.1	49.0	66.5	34.4	43.3	35.8
5	3.1	2.8	3.3	7.2	10.3	27.3	12.4	6.1
6+	1.3	0.7	0.8	1.7	3.0	7.5	21.2	2.4
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	2 088	1 721	2 248	1 452	942	477	386	9 314
Mean Ideal Number of Children								
For All Women	**2.7**	**2.8**	**3.2**	**3.6**	**3.9**	**4.0**	**4.4**	**3.2**
Number of All Women	2 088	1 721	2 248	1 452	942	477	386	9 314
For Currently Married Women	**2.9**	**2.8**	**3.2**	**3.6**	**3.9**	**4.1**	**4.5**	**3.4**
Number of Currently Married Women	186	1256	1 997	1 319	830	424	333	6 345
For Husbands	**2.8**	**2.8**	**3.1**	**3.6**	**3.9**	**4.3**	**4.5**	**3.4**
Number of Husbands	204	876	1 289	837	526	269	211	4 212

Figure 6.2 Percent Distribution of All Women by Ideal Number of Children, Mongolia 2003



In spite the tendency for rationalization, it was quite evident that the “ideal” number of children for many women was less than the actual number of children that they had. For example, among women with five living children 65 percent expressed a preference for fewer than five; and among women with six or more living chidlren, 79 percent would have preferred to have had fewer (Table 6.05).

The mean "ideal" number of children did not differ much for currently married women from that of all women: 3.4 of married women and 3.2 of all women. The mean ideal number of children slightly decreased (by 0.1) as compared with the RHS 1998. The mean "ideal" number of children was 3.5 for married women and 3.3 for all women. By contrast, the mean "ideal" number of children for women without living children was 2.7, which was significantly different from the previous survey results. Somewhat more surprising was the fact that the mean ideal number of children of husbands was almost identical to those of the currently married women. Joint family planning and communication between wives and husbands may explain this, despite that men were often thought to prefer larger family sizes.

Table 6.06 presents women's mean ideal number of children by age, according to residence, region and educational level. The ideal number of children stated by women increased with an increase in age of the women, from 2.6 among women aged 15-19 years to 3.9 among women aged 45-49 years. This increase implied that younger women's ideal number of children tended to be less than that of older women's. Women's ideal number of children was slightly higher for those living in rural areas compared with those living in urban areas, and for the Western region as compared with other regions. However, the precentage varried little according to educational level.

Table 6.06 Mean Ideal Number of Children for All Women by Age and Selected Background Characteristics, Mongolia 2003

Background Characteristics	Age 5-year Group							All Women	All Husband
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence									
Urban	2.7	2.9	3.0	3.2	3.4	3.6	3.8	3.2	3.4
Rural	2.6	2.7	3.1	3.4	3.7	3.9	4.1	3.3	3.4
Region									
Central	2.6	2.8	3.1	3.4	3.6	3.8	4.0	3.3	3.3
East	2.5	2.5	2.9	3.0	3.2	3.5	3.6	3.0	3.3
West	2.5	2.7	3.2	3.5	3.8	4.0	4.3	3.4	3.6
South	2.8	3.0	3.1	3.4	3.7	3.6	4.1	3.3	3.1
Ulaanbaatar	2.7	2.9	2.9	3.1	3.4	3.5	3.7	3.1	3.3
Highest Education Level									
Primary or Less	2.5	2.6	3.1	3.3	3.6	4.0	4.0	3.0	3.3
Incomplete Secondary	2.6	2.8	3.0	3.3	3.7	3.9	4.2	3.2	3.3
Complete Secondary	2.8	2.8	3.1	3.3	3.6	3.6	3.9	3.2	3.3
More than Secondary	*	2.9	3.1	3.3	3.5	3.6	3.8	3.4	3.5
All women	**2.6**	**2.8**	**3.1**	**3.3**	**3.6**	**3.7**	**3.9**	**3.2**	-
All husband	**2.5**	**2.8**	**3.0**	**3.1**	**3.5**	**3.7**	**3.9**	-	**3.4**

* Mean based on fewer than 25 cases.

Wanted and Unwanted Fertility

Women were asked a series of questions about each resent birth and any current pregnancy to determine whether that birth or pregnancy was planned, unplanned, but wanted at a later time, or unwanted. These questions permitted the establishment of good indicators regarding the degree to which women or couples successfully controlled the timing of childbearing and the number of children. Table

6.07 presents the percent distribution of births (including current pregnancy) by fertility planning status, according to mother's age at birth.

Among the births within the three years preceding the survey, 88 percent were born to mothers who wanted to have a child at that time, while 4 percent were born to mothers who had a plan to have a child during a later time. Conversely, 8 percent of those children were born to mothers who did not want any more children (unwanted births).

Table 6.07 Percent Distribution of Births (Including Current Pregnancy) in the Three Years Preceding the Survey by Fertility Planning Status, According Mother's Age at Birth, Mongolia 2003

Maternal Characteristic	Planning Status of Birth			Total	Number of Births
	Wanted Then	Wanted Later	Wanted No more		
Birth Order*					
1	90.3	3.3	6.4	100.0	1548
2	85.5	5.3	9.2	100.0	792
3	86.3	4.0	9.7	100.0	124
4+	73.8	4.8	21.4	100.0	42
Age at Birth*					
<19	77.9	10.8	11.3	100.0	222
20-24	91.2	4.1	4.7	100.0	894
25-29	92.3	2.2	5.5	100.0	729
30-34	86.8	3.3	9.9	100.0	423
35-39	79.1	4.4	16.5	100.0	206
40-44	67.7	0.0	32.3	100.0	31
Total	**88.3**	**4.0**	**7.7**	**100.0**	**2 506**

* Including current pregnancy

Unwanted pregnancies and births that occurred among adolescents under the age of 19 was 11 percent which was slightly less than the level recorded in the previous survey (12 percent in the RHS 1998). Among mothers aged 19 years and older, the proportion of unwanted births increased according to increasing age of mothers, from 5 percent among mothers aged 20-24 years to 32 percent among mothers aged 40-44 years. In particular, about 16 percent of the children born to mothers aged 35 years or older resulted in unwanted pregnancies. This was nearly half of that from the RHS 1998 (29 percent). Similarly, the proportion of unwanted births in each group was lower in 2003 compared to those in 1998. This decline indicated that over the years Mongolian women learned more about family planning methods and put them to use.

Table 6.08 compares the total number of wanted fertility rates with total fertility rates (TFR) for the three years preceding the survey, by residence, region and mother's educational level. Wanted fertility rates were calculated in exactly the same manner as the conventional age-specific fertility rates were except that the births classified as unwanted were omitted from the numerator. The age-specific wanted fertility rates were cumulated to form a wanted total fertility rate (wanted TFR) as they were when formulating the conventional total fertility rate (TFR). A birth was

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 implied the level of fertility that would have been achieved if all unwanted births were prevented.

A comparison of fertility rates recorded in the surveys of 1998 and 2003 revealed that wanted fertility rates and total fertility rates decreased by 0.4 and 0.6 points, respectively. If all Mongolia women had only the births that they had planned or wanted, the total fertility rate would be 2.3, instead of the current TFR of 2.5. The largest reduction between actual and wanted fertility occurred for women in rural areas, women in the Southern region and women with a primary educational level. Compared with 1998 RHS, the decrease between actual and wanted fertility rates were lower for most of the subgroups (of residence, region and educational level) in 2003 compared to those in 1998. The current TFR were lower in 2003 compared to the TFR in 1998, for all these subgroups (Table 6.08). This was regarded as an indication of successful use of family planning methods and contraceptives for fertility reduction.

Table 6.08 Total Wanted Fertility Rates and Total Fertility Rates (TFR) for the Three Years Preceding the Survey, by Selected Background Characteristics, Mongolia 1998, 2003

	Fertility Rates			
	Wanted TFR		TFR	
	1998	2003	1998	2003
Residence				
Urban	2.2	2.0	2.5	2.1
Rural	3.1	2.6	3.7	2.9
Region				
Central	2.9	2.3	3.2	2.6
East	2.4	2.5	3.0	2.8
West	3.3	2.7	3.9	2.9
South	3.1	2.6	3.5	3.0
Ulaanbaatar	2.0	1.9	2.2	1.9
Highest Education Level				
Primary or Less	2.8	2.6	3.4	3.2
Incomplete Secondary	3.1	2.4	3.7	2.8
Complete Secondary	2.7	2.2	2.9	2.4
More than Secondary	2.5	2.3	2.8	2.4
Total	**2.7**	**2.3**	**3.1**	**2.5**

Fertility preferences

In general, according to the survey results, Mongolian women and men tend to control their fertility relatively well. For example, 69 percent of currently married women reported using some type of contraceptive, achieving 94 percent of all demand for family planning. The percentage of currently married women who were using a contraceptive increased by 9 points as compared with the RHS 1998. The total met demand for family planning increased by 8 points.

More women desired to limit their family size. Among women with 2 living children, 65 percent indicated that they did not want more children and among those with 3 living children, 85 percent reported that they did not want any more children. .

Among recent births, 88 percent were reported wanted births, and 8 percent unwanted births. If unwanted births could have been avoided, the TFR would have been 2.3 instead of current the TFR of 2.5.

This demonstrated that use of contraceptives and family planning by Mongolian women was remarkable. Overall, the Reproductive Health programme in Mongolia has been successful in achieving a high level of current use of modern contraceptive methods, high percentage of total demand for family planing satisfied and a decrease in the number of unwanted births.

CHAPTER VII

INFANT AND CHILD MORTALITY

Amarbal Avirmed and Choijamts Gotov

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, decreased even more and by the end of 2003 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: MoH).

The Population Development Policy of Mongolia announced the intention to reduce the mortality rate of infants by one third from the level of 1990 within the period up to 2015 (The Population Development Policy of Mongolia, May 1996).The National Reproductive Health Programme has focused on reducing infant, child mortality and maternal mortality, including the improvement of RH care services. The infant mortality rate has been identified as one of the eight key indicators (under the first Objective of National RH programme) to assess the improvements of the National RH Programme which intends to reduce the infant mortality down to 27.0 per 1000 live births.

Infant and child mortality rates are useful not only to evaluate the progress of the National Reproductive Health Programme but also to monitor the current demographic situation and to provide input for population projection. Furthermore, these rates can provide information regarding levels and trends in mortality rates as well as differentials to identify population subgroups that have high mortality risks.

This chapter presents information on levels and differentials of infant and child mortality under the age of five by some demographic and social indicators. Unfortunately, it is not possible to show children's mortality risks according to risk factor of mother's birth interval and birth order since RHS 2003 did not have data on birth interval and birth order. Data on neonatal, postneonatal, infant, child and under-5 mortality were compiled by asking women for the number of recent births within the 5 years preceding the survey and their survival status, and age at death for those who died.

The following rates are used to measure early childhood mortality and are defined as follows:

- Neonatal mortality **(NN)**: the probability of dying within the first month of life.
- Postneonatal mortality **(PNN)**: the difference between infant and neonatal mortality.
- Infant mortality **($_1q_0$)**: the probability of dying between birth and the first birthday.
- Child mortality **($_4q_1$)**: the probability of dying between exact ages one and five.

Under-five mortality **($_5q_0$)**: the probability of dying between birth and the fifth birthday.

The accuracy mortality estimates depends on the sampling variability of the estimates and the nonsampling error (i.e. the completeness and accuracy with which births and deaths are reported and recorded). The most serious source of nonsampling error in mortality data is underreporting of births and deaths of children who do not survive (United Nations 1982, and J. M Sullivan, 1996). When there is underreporting of deceased children in a survey, it is most severe for deaths which occur in early infancy (neonatal period). If there is serious underreporting of early neonatal deaths, the neonatal to infant mortality ratio will be low.

Table 7.01 shows neonatal, infant and childhood mortality rates from the RHS 2003. During the 0-3 year period prior to survey, the value of the ratio of neonatal mortality to infant mortality was 0.46. This ratio came close to those countries known for having complete and accurate mortality data (whose ratios range from 0.50 and 0.60 for infant mortality level of about 40-50 per 1000 live births) [J.M Sullivan, 1996]. Thus, this data did not suggest a substantial underreporting of neonatal deaths.

Table 7.01 Neonatal, Postneonatal, Infant, and Childhood Mortality for Three-Year Periods Preceding the Survey, Mongolia 2003 (Excludes Month of Interview From Analysis)*

Three-year	Mortality Rate (Per Thousand)				
	Neonatal Mortality **(NN)**	Postneonatal Mortality **(PNN)**	Infant Mortality **(1q0)**	Child Mortality **(4q1)**	Under-Five Mortality **(5q0)**
0-4	**13.4**	**16.1**	**29.5**	**5.2**	**34.5**

* Data for infant and child mortality are derived from births in the 3 years preceding the survey and not from the retrospective birth history (as in RHS 1998), and therefore mortality estimates for 5-9 and 10-14 years before the survey cannot be obtained for comparative analysis with RHS 1998.

United Nations. 1982. – Non-sampling errors in household surveys: Sources, assessment and control. National Household Survey Capability Programme. New-York United Nations.
Sullivan, J.M. 1996. – National Institute of Nutrition (Kazakstan) and Macro International Inc. 1996 Kazakstan Demographic and Health Survey, 1995. Chapter 8. Calverton, Maryland

Mortality levels

For the 3-year period preceding the survey (2001 to 2003), the infant mortality rate was estimated at 30 deaths per 1000 live births, while neonatal and post-neonatal mortality rates were 14 deaths per 1000 and 16 deaths per 1000 births, respectively. For the same period, the mortality rate for the 5 years and under age group was estimated at 35 deaths per 1000 births, while child mortality (aged 1-5 years) was much lower at 5 deaths per 1000 births. These direct estimates were quite close to the indirect estimates (using MORTPAK) which were 34 deaths per 1000 births($_1q_0$) and 8 per 1000 for child mortality ($_4q_1$), for the year 2002 (see detailed output of MORTPAK in Table 7.01A).

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Table 7.02 Comparison of Infant Mortality Rate from RHS and Ministry of Healty (MoH)

	Time period
Sourse	2001-2003
RHS 2003 (Direct estimate)	29.5
MORTPAK (Indirect estimate)	34.0 (For 2002)
MoH (Direct estimate)	28.2

Official statistics reflecting infant mortality are published in the annual Health Statistical Report of Ministry of Health (MoH).

Table 7.02 shows infant mortality rates based on RHS 2003 and MoH for the period 2001-2003. The estimates for infant mortality rates during the period 2001-2003 were very close to the rates in RHS 2003 and MORTPAK.

Mortality Differentials

In the following section, infant and child mortality differentials are presented according to socioeconomic variables or characteristics and bio-demographic variables that were included in RHS 2003.

Table 7.03 presents the neonatal, postneonatal, infant and child mortality rates for the 3 year period preceding the survey, by residence, region of residence, and mother's educational level.

Infant mortality was higher in rural areas (32 per 1000) than in urban areas (26 per 1000), while the urban-rural differential was less pronounced for neonatal mortality (15 per 1000 versus 11 per 1000) and for under-five mortality (36 per 1000 versus 33 per 1000). Long distances to health facilities and lack of medical emergency services may be contributing factors to infant mortality within rural areas (Table 7.03).

The neonatal, infant and under-five mortality demonstrate important differentials by region. These mortality rates were highest in the Western Region and lowest in the Southern Region. In general, these mortality rates were relatively high in the Western, Eastern and Central Regions (with infant mortality varying from 33 to 42 per 1000, neonatal mortality from 14 to 19 per 1000, and under-five mortality from 33 to 42 per 1000) and were lower in the Southern Region and Ulaanbaatar (with infant mortality ranging from 21 to 23 per 1000, neonatal mortality from 3 to 12 per 1000, and under-five mortality from 27 to 29 per 1000).

Table 7.03 Neonatal, Postneonatal, Infant, and Childhood Mortality by Selected Socioeconomic Background Characteristics for the Three Year Period Preceding the Survey, Mongolia 2003 (Excludes Month of Interview From Analysis)

Variable & Category	Mortality Rate (Per Thousand)				
	Neonatal Mortality **(NN)**	Postneonatal Mortality **(PNN)**	Infant Mortality **(1q0)**	Child Mortality **(4q1)**	Under-Five Mortality **(5q0)**
Residence					
Urban	11.1	15.3	26.4	6.5	32.7
Rural	15.2	16.7	31.9	4.2	35.9
Economic Region					
Central	13.7	17.7	31.4	3.3	34.6
East	18.6	13.9	32.5	0.0	32.5
West	15.7	18.7	34.5	7.5	41.7
South	2.9	18.2	21.1	6.1	27.1
Ulaanbaatar	11.7	11.0	22.7	6.5	29.1
Monthly average income per person					
No income, less than 8500	15.9	22.2	38.1	7.8	45.5
8501-21250	12.1	14.7	26.8	4.5	31.2
21251-42500	14.2	16.2	30.3	5.4	35.6
More than 42501	10.1	3.5	13.6	0.0	13.6
Highest Education Level					
Less than Grade 4	19.8	20.5	40.3	8.4	48.4
Grade 4-8	17.6	21.4	39.0	8.2	46.9
Grade 9-10	13.7	15.0	28.8	3.0	31.7
More than Grade 10	7.3	11.1	18.5	3.9	22.3
Total	**13.4**	**16.1**	**29.5**	**5.2**	**34.5**

Upon examination of neonatal, infant and child mortality rates by per capita monthly average income, the mortality rate is very low for households with an income of 42501 MNT(13 deaths per 1000 births) whereas it is as much as three times higher for household with no income or income of 8500. There was no mortality rate in the ages of 12-4 years for households with an income of 42501. But for households with no income or income of 8500, the indicators was high (8 deaths per 1000 births) which duly requires the attention.

Table 7.03 shows that the mother's educational level was inversely associated with childhood mortality (neonatal, infant and under-five mortality). For example, infant mortality rate declined from 40 deaths per 1000 births among children of mothers with a primary educational level to 19 deaths per 1000 births among children born to mothers with a higher education level. A similar, but more substantial decline was also observed for under-five mortality, dropping from 48 deaths per 1000 births among children of mothers with a primary educational level to 22 deaths per 1000 births among children born to mothers with a higher education level. Similarly, a less pronounced decline by education was noted for neonatal mortality: from 20 deaths per 1000 births among children of less educated mothers to 7 deaths per 1000 births among children with mothers who had higher educational levels.

This itself requires more attention to development of realistic strategy by health organizations and programmes and improvement of health awareness of women with less education and income and women in Central, Eastern and Western regions. Similarly, the focus should be made to access of reproductive health care and services to these women.

Table 7.03 also presents neonatal, post neonatal, infant and child mortality rates for the 3-year period preceding the survey by sex of child and mothers age at birth. In general, childhood mortality rates for male children were higher when compared to female children. The largest male-female differentials was from both infant mortality (35 per 1000 versus 24 per 1000) and under-five mortality (40 per 1000 versus 29 per 1000), followed by post neonatal mortality (20 per 1000 versus 12 per 1000) and neonatal mortality (15 per 1000 versus 12 per 1000).

Mother's age at birth can influence a child's chances of survival. Table 7.03 shows that the childhood mortality rates (neonatal, infant and under-five mortality rates) followed a U-shaped pattern according to mother's age at birth. This finding implied that the probability of dying for children born to mothers aged over 30 years and to mothers aged younger than 20 years high. For example, the mortality rates of infants born to mothers under the age of 20 was higher by 12 points compared to those infants born to mothers aged 20-29 years (41 versus 29 per 1000). Similarly, under-five mortality of children born to mothers under the age of 20 was higher by 17 points than those infants born to mothers aged 20-29 years (51 per 1000 versus 34 per 1000).

Note on: Indirect mortality estimates using MORTPAK procedure and printed output of mortality estimates

Infant and child mortality rates were also estimated indirectly from data on the mean of children ever born (CEB) and the mean number of children surviving tabulated by age group of mother, by using MORTPAK (The United Nations software Package for Mortality Measurement).

Briefly, the technique from the MORTPAK was developed by Brass who has shown that the probability of dying between birth and age x [q(x)] can be estimated as $q(x) = {}_5M_a * {}_5D_a$ where ${}_5D_a$ refers to the proportion of children dead to women in age group (a, a+5) and ${}_5M_a$ is an age-specific factor, called a multiplier, which depends on indices of the age pattern of fertility. Thus, the proportion of children dead for women in age groups 15-20, 20-25, 25-30, …, 45-50 are used to estimate q(x) where values of x equal to 1, 2, 3, 5, 10, 15 and 20. Nine separate sets of regression equations have been estimated, the first five for each of the United Nations models and the last four each of the Coale and Demeny models. Finally, regression equations are used to estimate the infant mortality rate (${}_1q_0$), the child mortality rate (${}_4q_1$), and the life expectancy at birth corresponding to the q(x) values within each model life table pattern.

The output of the MORTPAK, using data of mean CEB and mean children surviving, tabulated by age of mother from RHS 2003, is shown in Table 7.01A. From the second panel, under the column "United Nations Models for Far East", the infant and child mortality rates for the year 2002 are: 34 per 1000 for infant mortality rate (${}_1q_0$) and 8 per 1000 for child mortality rate (${}_4q_1$), and the life expectancy at birth in 67 years (both sexes combined). The infant and child mortality rates were slightly higher than those from the RHS for the year 2001-2003: infant mortality rate of 30 per 1000 and child mortality rate of 5 per 1000.

This implies there was slight underreporting of infant ad child deaths. The underreporting was not serious. Furthermore, the expected life expectancy at birth from MORTPAK (67) was close to that estimated by other independent sources from the recent census vital statistics (65).

TABLE 7.01A INDIRECT ESTIMATION OF EARLY AGE MORTALITY FOR Mongolia RHS 2003 IM

ENUMERATION OF SEP 2003

AGE OF WOMAN	AVERAGE NO. OF CHILDREN BORN	AVERAGE NO. OF CHILDREN SURVIVING	PROPORTION DEAD	AGE X
15-20	0.064	0.062	.031	1
20-25	0.746	0.715	.042	2
25-30	1.628	1.529	.061	3
30-35	2.450	2.272	.073	5
35-40	3.270	2.955	.096	10
40-45	4.004	3.562	.110	15
45-50	4.845	4.174	.138	20

MEAN AGE AT CHILDBEARING = 25.50

PROBABILITY OF DYING BEFORE AGE X

AGE OF WOMAN	UNITED NATIONS MODELS (PALLONI-HELIGMAN EQUATIONS) LAT AM	CHILEAN	SO ASIAN	FAR EAST	GENERAL	COALE-DEMENY MODELS (TRUSSELL EQUATIONS) WEST	NORTH	EAST	SOUTH
15-20	.035	.038	.035	.034	.034	.039	.039	.039	.038
20-25	.045	.046	.046	.045	.045	.045	.044	.045	.045
25-30	.062	.062	.062	.061	.061	.061	.058	.061	.062
30-35	.072	.073	.073	.072	.072	.072	.071	.072	.073
35-40	.097	.096	.097	.095	.096	.097	.099	.098	.098
40-45	.106	.108	.110	.106	.106	.110	.112	.110	.110
45-50	.135	.134	.137	.132	.134	.137	.138	.137	.137

CORRESPONDING MORTALITY INDICES

AGE OF WOMAN	UNITED NATIONS MODELS (PALLONI-HELIGMAN EQUATIONS) REFERENCE DATE	LAT AM	CHILEAN	SO ASIAN	FAR EAST	GENERAL	COALE-DEMENY MODELS (TRUSSELL EQUATIONS) REFERENCE DATE	WEST	NORTH	EAST	SOUTH
INFANT MORTALITY RATE											
15-20	AUG 2002	.035	.038	.035	.034	.034	JAN 2003	.039	.039	.039	.038
20-25	SEP 2001	.039	.043	.040	.040	.040	OCT 2001	.040	.037	.042	.042
25-30	JAN 2000	.049	.056	.050	.050	.050	SEP 1999	.050	.044	.054	.053
30-35	JUL 1997	.052	.063	.054	.054	.054	FEB 1997	.054	.048	.060	.059
35-40	AUG 1994	.063	.077	.066	.064	.065	APR 1994	.065	.057	.074	.072
40-45	MAY 1991	.065	.083	.071	.066	.067	MAR 1991	.069	.059	.079	.077
45-50	NOV 1987	.076	.096	.083	.073	.077	MAR 1988	.077	.065	.090	.086
PROBABILITY OF DYING BETWEEN AGES 1 AND 5											
15-20	AUG 2002	.011	.005	.010	.008	.009	JAN 2003	.012	.018	.006	.005
20-25	SEP 2001	.013	.006	.012	.011	.011	OCT 2001	.012	.016	.007	.007
25-30	JAN 2000	.019	.009	.017	.016	.017	SEP 1999	.017	.021	.011	.012
30-35	JUL 1997	.021	.011	.020	.019	.019	FEB 1997	.019	.024	.014	.015
35-40	AUG 1994	.029	.016	.028	.025	.026	APR 1994	.026	.031	.019	.024
40-45	MAY 1991	.031	.018	.032	.026	.028	MAR 1991	.028	.033	.022	.028
45-50	NOV 1987	.040	.023	.041	.031	.035	MAR 1988	.033	.039	.027	.037
LIFE EXPECTANCY AT BIRTH											
15-20	AUG 2002	73.0	73.1	74.2	67.0	71.3	JAN 2003	67.2	67.3	69.2	74.5
20-25	SEP 2001	71.5	71.5	72.7	65.0	69.5	OCT 2001	66.9	67.8	68.5	73.4
25-30	JAN 2000	68.6	68.2	70.1	61.6	66.4	SEP 1999	64.6	65.7	66.1	70.4
30-35	JUL 1997	67.5	66.6	68.9	60.3	65.2	FEB 1997	63.6	64.8	65.0	68.8
35-40	AUG 1994	64.5	63.2	66.0	57.3	62.2	APR 1994	61.2	62.4	62.4	65.5
40-45	MAY 1991	63.8	61.9	64.8	56.7	61.5	MAR 1991	60.4	61.8	61.5	64.3
45-50	NOV 1987	61.0	59.2	62.0	54.9	58.9	MAR 1988	58.6	60.1	59.5	61.8

Summary and Conclusion

During the three years preceding the survey (2001 to 2003), the infant mortality rate was estimated at 30 deaths per 1000 births, while neonatal and post-neonatal mortality rates were 14 deaths per 1000 births and 16 deaths per 1000 births, respectively. For the same period, under-five mortality rate was estimated at 35 deaths per 1000 births, while child mortality (age 1-4 years) was much lower at 5 deaths per 1000 births. These direct estimates were quite close to the indirect estimates (using MORTPAK), which were 34 deaths per 1000 births for infant mortality ($_1q_0$) and 8 deaths per 1000 births for child mortality ($_4q_1$), for the year 2002. The infant mortality rate was also close to that of Ministry of Health (28 per 1000).

Infant mortality was higher in rural areas (32 per 1000) compared urban areas (26 per 1000). Long distances to health facilities and lack of access to antenatal and delivery care are probable causal factors related to infant mortality in rural areas

In general, childhood mortality (neonatal, infant, and under-five mortality) rates were relatively high in the Western, Eastern and Central Regions and low in the Southern Region and Ulaanbaatar. In addition, like in other countries a mother's educational level was inversely associated with neonatal, infant and under-five mortality and the mortality rate was higher for male infants than female infants.

Neonatal, infant and child mortality rates by per capita monthly average income, the mortality rate is very low for households with an income of 42501 MNT(13 deaths per 1000 births) whereas it is as much as three times higher for household with no income or income of 8500(38 deaths per 1000 births). There was no mortality rate in the ages of 12-4 years for households with an income of 42501. But for households with no income or income of 8500, the indicators was high (8 deaths per 1000 births) which duly requires the attention.

Hence, more attention should be paid to development of realistic strategy by health organizations and programmes and improvement of health awareness of women with less education and income and women in Central, Eastern and Western regions. Similarly, the focus should be made to access of reproductive health care and services to these women.

CHAPTER VIII

REPRODUCTIVE AND CHILD HEALTH*

Saranchimeg Byamba, Soyolgerel Gochoo

In recent years, Mongolia has experienced substantial achievements in the national health care sector, especially regarding improvements within main health indicators such as infant and child mortality rates. A number of factors, such as the introduction of international standards in diagnosis and treatment of acute respiratory infections and diarrhea diseases, promotion of breast-feeding, and successful implementation of the national vaccination campaign and reproductive health program, may have positively influenced to this outcome.

The Programme of Action of the International Conference on Population and Development (ICPD) held in Cairo in 1994 states: "... All countries should strive to make accessible through primary health-care system, reproductive health services to all individuals of appropriate ages as soon as possible and no later than 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).

The present survey undertaken by the National Statistical Office with financial assistance from UNFPA will certainly contribute to the implementation of the national health programmes.

According to the Law on Health of Mongolia, the "primary health care" constitutes is the essential and basic health services provided by the primary health institutions to the population. This chapter specifically describes the primary health services, including:

- Antenatal and delivery care
- Characteristics of the delivery
- Common childhood illnesses and their treatment

Few countries have reliable national data and estimates on antenatal and delivery care as well as child and women's health care. This information is of great value in identifying subgroups of women who do not utilize these services, and in evaluating the quality of services provided. In particular, antenatal and delivery care are investigated by a number of indicators or variables, including the timing of the first antenatal visit, by the type of service providers who offered the care both during pregnancy and during childbirth, presence of associated diseases, and pregnancy and childbirth complications, where the delivery took place, and whether the baby was delivered by cesarean section or not.

* For easy reading and comprehension of the text for the comparison of two surveys (RHS 1998 and RHS 2003), periods (3-year or 5-year) covered in RHS 1998 are reffered as 1998, and periods (3-year or 5-year) covered in RHS 2003 as 2003. Readers can obtain the actual periods covered from the related tables.

Antenatal Care

Regular visits to the nearest health facilities or service providers for counseling and continuous monitoring to detect and treat illnesses and associated diseases are very important for reducing pregnancy and childbirth complications. In the RH Survey 1998, 96 percent of births to women who gave birth in the last 5 years received antenatal care. In the present survey, this proportion has increased to 99 percent with only one percent who did not received prenatal care services (Table 8.01).

Table 8.01 Percent Distribution of Live Births in the Last 5 Years by Source of Antenatal Care (ANC) During Pregnancy, According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Antenatal Care								Number of Births
	Gynecologist	Medical doctor	Prof. Midwife	Family Doctor	Bagh Feldsher	Medical assist	No one	Total	
Age at Birth									
<20	49.9	11.0	18.6	9.2	7.6	1.0	2.6	100.0	381
20-34	53.1	8.8	20.0	11.5	5.0	0.6	1.1	100.0	3 008
35+	59.6	6.8	19.9	9.6	3.1	0.3	0.6	100.0	322
Residence									
Urban	63.4	6.9	5.9	21.9	0.9	0.3	0.7	100.0	1 611
Rural	45.6	10.3	30.6	2.8	8.3	0.8	1.6	100.0	2 100
Economic Region									
Central	51.2	11.4	20.3	9.8	5.0	1.0	1.3	100.0	1 259
East	49.0	8.0	22.8	8.5	8.0	2.0	1.7	100.0	351
West	38.8	8.4	34.2	8.0	9.1	0.2	1.3	100.0	933
South	65.5	10.7	14.8	3.8	3.8	0.0	1.4	100.0	290
Ulaanbaatar	69.5	5.4	4.4	19.6	0.2	0.1	0.8	100.0	878
Highest Education Level									
Primary or less	39.9	14.0	26.1	5.7	10.8	0.5	3.0	100.0	406
Incomplete secondary	46.5	9.6	24.7	7.1	9.4	0.7	2.1	100.0	1 018
Complete secondary	57.5	8.9	17.4	12.4	2.8	0.6	0.4	100.0	1 141
More than Secondary	60.1	6.2	15.9	15.2	1.5	0.5	0.6	100.0	1 146
Total	**53.3**	**8.8**	**19.9**	**11.1**	**5.1**	**0.6**	**1.2**	**100.0**	**3 711**

Among women who received antenatal care (ANC) services, 53 percent of births were attended by obstetrics and gynecology specialists, 8 percent by medical doctors, 20 percent by professional midwives, 11 percent by family general practitioners, and 5 percent by bagh feldshers. The majority (93 percent) of births obtained antenatal care from health professionals. This percentage was higher than that of the 1998 RH survey by 3 points. In particular, regarding those living in urban areas, the percentage of births that received antenatal services from obstetricians and doctors has remained the same at 92 percent in both the RHS 1998 and the RHS 2003. However, in rural areas, this percentage has risen from 48 percent in 1998 to 59 percent in 2003, an increase of 11 points. It is noted that in 2003, 22 percent of births to urban women received antenatal services from Family general practitioners (FGPs) or doctors who were not available in 1998, indicating an expansion of family health services. Among rural women whose births were attended by midwives, bagh feldshers and assistants, the percentage has declined from 48 percent in 1998 to 40 percent in 2003, suggesting that, in rural areas especially at soums, midwives, bagh feldshers and other medical assistants, still played an important role in ANC. It was interesting to observed that the proportion of births to women seeking ANC from " No one" has decreased ropped from four percent in 1998 to one percent in 2003.

Relatively high percentage of births to women from certain sub-groups still seeks ANC from "No one". For example, births to women under 20 years old has the highest proportion (2.6 percent) receiving ANC from "No one", compared with other age groups. Similarly, the highest percentage of births to women who did not receive ANC among various subgroups are: 3 percent among women with primary education, and 2 percent among rural women.

Antenatal care visit

Early enrollment in ANC during the first trimester of pregnancy reduces the risk of a number of complications of pregnancy and childbirth. The percent distribution of births during the in preceding 5 years by timing of the first antenatal visit and median gestational months at first ANC visit are shown in Table 8.02. Substantial increase in the percentage of births to women who first visited health facilities for ANC within 4 months or 6 months of pregnancy: rising from 56 percent in 1998 to 72 percent in 2003 among women within 4 months of pregnancy, and 83 percent in 1998 to 93 percent in 2003 among women within 6 months of pregnancy. The median is an indicator which divides the population equally in two halves. The survey results show that, in 1998, 50 percent of births to women who gave birth during the in preceding 5 years made their first ANC visit within 3.7 months of pregnancy, and in turn the remaining 50 percent made their first antenatal care visit after 3.7 months of pregnancy. During in 2003, the median months of the first ANC visit was reduced to 3.3 months. Rural women were more likely to enroll in ANC later than urban women, and their median months are 3.4 months and 3.1 months respectively.

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, 2003

Timing of First Antenatal Care	RHS 1998 Total Number of Births	RHS 2003 Total	RHS 2003 Urban	RHS 2003 Rural
No Antenatal Care	3.7	1.2	0.7	1.6
Less than 4 Months	56.4	72.4	78.6	67.6
4-5 Months	27.0	21.0	16.9	24.1
6-7 Months	9.2	4.5	3.1	5.5
8+ Months	3.6	1.0	0.7	1.1
DK/Missing	0.2	0.0	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**
Median	3.7	3.3	3.1	3.4
Total	3 857	3 711	1 611	2 100

Usage of Iron Pills

The Maternal Mortality Reduction Strategy, launched by the MOH in 2001, highlights that chronic anemia occurres in 40 percent of Mongolian women of childbearing age. Thus, doctors now recommend that pregnant women take iron pills every day during the first 3 months or first trimester of pregnancy. Pregnant women should use iron pills according to the doctor's recommendations.

The survey results show that 43 percent of most recent births were to women who took fewer than 90 iron tablets, and 27 percent of them took more than 90 tablets, while 29 percent took none (Table 8.03). Compared to the 1998 results, the percentage of recent births to women who took less than 90 tablets increased by 8 points, the percentage of those who took more than 90 tablets increases by 20 points, while the proportion of births to women who took no iron tablets decreases by 28 points.

The proportion of births to women who did not take iron tablets was the highest among women under 20 years old (33 percent), but it was half of that (62 percent) in 1998. In terms of by residence, the proportion was 28 percent among urban women and 30 percent among rural women who did not receiving iron supplements. The corresponding figures for 1998 (RHS) are much higher: 54 percent in urban areas and 60 percent in rural areas.

Among geographical regions, the Western region (36 percent) has highest proportion of births to women who received no iron pills. Also observed were that women with a higher educational level are more likely to take iron tablets during pregnancy.

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 Selected Background Characteristics, Mongolia 2003

Background Characteristics	Number of Iron Pills					Number of Births
	None	Less than 90	90 or more	DK	Total	
Age at Birth						
<20	33.0	41.1	26.0	0.0	100.0	285
20-34	29.2	43.6	27.1	0.1	100.0	2 491
35+	26.5	44.2	29.4	0.0	100.0	310
Residence						
Urban	28.4	46.5	25.0	0.1	100.0	1 405
Rural	30.0	40.7	29.1	0.1	100.0	1 681
Economic Region						
Central	27.9	41.6	30.5	0.0	100.0	1 041
East	20.8	53.5	25.7	0.0	100.0	303
West	36.7	40.3	23.0	0.0	100.0	712
South	19.3	42.9	37.0	0.8	100.0	238
Ulaanbaatar	30.7	44.8	24.4	0.1	100.0	792
Highest Education Level						
Primary or less	36.3	39.9	23.5	0.3	100.0	311
Incomplete secondary	33.7	39.8	26.3	0.1	100.0	806
Complete secondary	27.8	45.0	27.1	0.1	100.0	958
More than Secondary	24.9	45.8	29.3	0.0	100.0	1 011
Total	**29.3**	**43.4**	**27.3**	**0.1**	**100.0**	**3 086**

Pregnancy difficulties

Safe delivery largely depends on a woman's health condition and her readiness for becoming a mother. Table 8.04 summarizes information reflecting on pregnancy difficulties during the last 5 years as well as during the last gestation, by type of difficulties, and age, geographical region, residence and educational level. While majority (85 percent) of births to women who said that they did not experience had no difficulties with their last pregnancy, 11 percent had symptoms associated with elevated blood pressure such as headache, dizziness and blurred vision, 8 percent experienced had facial swelling, and 3 percent experienced had prematurely ruptured membranes. The prevailing complications are high blood pressure and swelling, particularly among the women 35 years and older.

The proportion of births to women who had no complications is the same in urban and rural areas (86 percent each). Geographically, the proportion of births to women without pregnancy complications was highest in the Southern region (90 percent) and lowest in the Eastern region (84 percent).

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 Selected Background Characteristics, Mongolia, 2003

Background Characteristics	Difficulties in Carrying Pregnancy						Number of Births
	None	Vaginal Bleeding	Headache & Feel dizzy	Convulsions or Fits	Face Swelling	Premature Rupture Membrane	
Age at Birth							
<20	91.2	2.5	6.3	1.1	4.6	1.1	285
20-34	85.5	3.1	10.8	1.5	7.5	3.4	2 491
35+	81.0	2.6	14.8	0.6	12.3	2.3	310
Residence							
Urban	85.6	2.8	10.6	1.4	8.6	3.7	1 405
Rural	85.5	3.0	11.0	1.4	7.0	2.6	1 681
Region							
Central	84.9	2.9	11.4	1.6	7.5	3.2	1 041
East	84.2	3.0	11.2	1.0	8.3	3.0	303
West	85.1	3.7	11.0	2.1	7.6	3.7	712
South	89.9	0.8	7.6	0.4	4.6	0.4	238
Ulaanbaatar	86.0	3.0	10.7	0.9	8.8	3.3	792
Highest Education Level							
Primary or less	88.4	2.6	7.7	1.0	4.8	2.3	311
Incomplete secondary	88.1	2.2	9.8	1.7	6.1	3.5	806
Complete secondary	85.4	3.1	10.6	1.1	7.9	2.7	958
More than Secondary	82.8	3.5	12.8	1.5	9.7	3.4	1 011
Total	**85.5**	**2.9**	**10.8**	**1.4**	**7.7**	**3.1**	**3 086**

Diseases Associated with Pregnancy

Table 8.05 presents the percent distribution of most recent live births in the last 5 years by diseases suffered by mothers during pregnancy and selected background characteristics.

The proportion of most recent births to women who had no diseases during pregnancy is 54 percent. Among the last pregnancies leading to most recent live

births 32 percent of births to women who suffered from kidney disease, followed by 14 percent with heart disease, 10 percent with disease of the digestive tracts, and 7 percent with liver and gall bladder disorders. Compared to the 1998 RHS results, the overall prevalence of diseases during last pregnancies which leading to recent live births has moderately increased. In particular, the prevalence of heart, urinary tract and liver disorders has increased by 5-7 points. The prevalence of lung and neurological diseases was relatively low, but still higher than those in 1998.

Women over 35 years old were more likely to suffer from diseases associated with pregnancy. For example, 51 percent of recent births to women who had at least one disease associated with the most recent pregnancy, including 34 percent associated with kidney and 12 percent with bladder diseases. Regionally, births to women living in the Central region experienced have the highest rate of diseases associated with pregnancy (53 percent having at least one disease), while it is lowest in the Western region (41 percent).

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 Selected Background Characteristics, Mongolia 2003

Background Characteristics	Disease During Pregnancy							Number of Births
	Heart	Kidney	Liver	Lung	Digestive Apparatus	Nervous	None	
Age at Birth								
<20	11.9	29.5	4.2	4.6	10.5	2.8	56.8	285
20-34	13.1	32.0	6.3	3.3	10.2	2.1	54.5	2 491
35+	19.0	34.2	12.3	4.2	11.9	3.5	49.4	310
Residence								
Urban	13.7	31.2	5.5	3.1	7.8	1.5	55.0	1 405
Rural	13.4	32.7	7.8	3.8	12.7	3.0	53.5	1 681
Region								
Central	15.9	37.5	7.5	3.9	14.2	2.9	47.9	1 041
East	17.2	27.1	5.9	5.0	10.6	4.3	56.8	303
West	11.5	31.2	7.2	2.8	8.3	1.3	58.8	712
South	15.5	28.2	9.7	2.9	10.5	3.8	55.0	238
Ulaanbaatar	10.4	28.7	4.8	3.2	7.3	1.3	57.1	792
Highest Education Level								
Primary or less	15.8	34.7	7.7	6.1	13.2	5.1	52.1	311
Incomplete secondary	12.3	31.8	6.2	2.9	12.5	1.9	54.7	806
Complete secondary	13.7	29.5	5.8	3.5	10.1	1.7	55.9	958
More than Secondary	13.8	33.7	7.7	3.2	8.2	2.4	52.8	1 011
Total	**13.6**	**32.0**	**6.7**	**3.5**	**10.4**	**2.3**	**54.2**	**3 086**

Maternity waiting home services

Although at the beginning of 1990s, the vast majority of maternity rest homes were dissolved which affected maternity services, these are now been re-established. In the present survey questionnaire, a question was added on whether the respondent used maternity rest home services in the most recent five years. The result was that 19 percent of all women and 23 percent of rural women who gave births, within the past five years preceding the survey, used maternal rest home services.

Place of deliveries

Table 8.06 shows that among live births within the last five years, 97 percent were born in a hospital or clinic while 2 percent were born at home, and less than one percent were born elsewhere. Compared to the 1998 figure, the percentage of deliveries at health facilities has increased by 3 points, from 94 percent as reported in 1998 RHS to 97 percent in 2003. The percentage of the children born at home to women of aged 35 years or older was the highest (7 percent) in 1998. But it has ropped substantially in 2003 2 percent. Home deliveries are more common among adolescent mothers (6 percent), compared to although age groups. Home deliveries are still most common in rural areas in 1998 and 2003; their proportion has decreased by a half from 7 percent in 1998 to 3 percent in 2003. Table 8.06 also shows the proportion of births delivered at home declines with increasing mother's educational level, dropping from 5 percent among mothers with primary education to one percent among mothers with completed their secondary education.

Table 8.06 Percent Distribution of Live Births in the Last 5 Years by Place of Delivery, According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Place of Delivery				Number of Births
	Health Facility	At Home	Other	Total	
Age at Birth					
<20	94.0	5.5	0.5	100.0	381
20-34	97.6	1.9	0.5	100.0	3 008
35+	98.1	1.6	0.3	100.0	322
Residence					
Urban	99.0	0.7	0.2	100.0	1 611
Rural	96.0	3.4	0.6	100.0	2 100
Region					
Central	95.9	3.3	0.9	100.0	1 259
East	97.7	2.3	0.0	100.0	351
West	97.2	2.6	0.2	100.0	933
South	98.3	1.0	0.7	100.0	290
Ulaanbaatar	98.9	0.9	0.2	100.0	878
Highest Education Level					
Primary or less	94.3	5.4	0.2	100.0	406
Incomplete secondary	96.1	3.5	0.4	100.0	1 018
Complete secondary	98.0	1.4	0.6	100.0	1 141
More than Secondary	98.7	0.9	0.4	100.0	1 146
Total	**97.3**	**2.3**	**0.5**	**100.0**	**3 711**

Assistance at Delivery

Percent distribution of live births in the last 5 years by type of assistance during delivery and background characteristics is presented in Table 8.07. The table shows that almost all births (97 percent) were delivered by health professionals and it is higher than that (93 percent) in 1998. Among them, 59 percent were delivered by gynecologists, 27 percent by midwives, and 11 percent by medical doctors other than. Compared with 1998 data, the percentage of births delivered by gynecologists increases by 19 points, while the percentage of births delivered by midwives

decreases by 13 points. As the maternal age increased, the proportion of births assisted by gynecologists also increases. This number rising from 57 percent among women age under 20 years of age to 62 percent among women aged 35 years and older. Births from women of a higher educational level obtainment are more likely to seek delivery assistance from gynecologists, from 50 percent among women with primary education to 63 percent among women completed secondary education. Hence, gynecologists are predominantly utilized during delivery of births in urban areas (70 percent) more than rural areas (51 percent) as well as in Ulaanbaatar (77 percent) and more than within other regions (29-40 percent).

Table 8.07 Percent Distribution of Live Births in the Last 5 Years by Type of Assistance During Delivery, According to Background Characteristics, Mongolia 2003

Background Characteristics	Assistance During Delivery								Number of Births
	Gynecologist	Other Doctor	Prof. Midwife	Other Midwife	Medical Assist.	Other	No one	Total	
Age at Birth									
<20	57.0	10.5	26.5	1.8	0.3	3.7	0.3	100.0	381
20-34	59.3	11.1	27.2	1.0	0.3	1.0	0.1	100.0	3 008
35+	62.4	9.3	27.3	0.0	0.0	0.9	0.0	100.0	322
Residence									
Urban	70.2	8.2	20.8	0.2	0.1	0.4	0.1	100.0	1 611
Rural	51.0	13.0	32.0	1.6	0.5	1.9	0.1	100.0	2 100
Region									
Central	55.6	10.8	29.9	1.2	0.6	1.7	0.2	100.0	1 259
East	59.5	10.0	24.8	2.8	0.3	2.3	0.3	100.0	351
West	46.2	14.7	37.0	0.9	0.1	1.1	0.1	100.0	933
South	64.8	11.0	22.1	1.0	0.0	1.0	0.0	100.0	290
Ulaanbaatar	76.7	7.3	15.1	0.2	0.1	0.5	0.1	100.0	878
Highest Education Level									
Primary or less	50.2	14.5	28.8	1.7	0.5	3.9	0.2	100.0	406
Incomplete secondary	53.8	11.5	30.9	1.1	0.4	1.9	0.4	100.0	1 018
Complete secondary	63.5	9.6	24.8	1.3	0.3	0.5	0.0	100.0	1 141
More than Secondary	63.3	10.3	25.4	0.4	0.2	0.4	0.0	100.0	1 146
Total	**59.3**	**10.9**	**27.1**	**1.0**	**0.3**	**1.2**	**0.1**	**100.0**	**3 711**

Delivery Characteristics

Table 8.08 shows that in the five years preceding the surveys, 10 percent of births were delivered by cesarean section, which is higher number than that in 1998 by 5 points. Delivery by cesarean sections is more common in urban areas (14 percent), among older women age 35+ (22 percent), and in Ulaanbaatar (17 percent). The prevalence of cesarean sections in women with higher than secondary education level and higher was 13 percent, which is 6 points higher than that in 1998.

The survey also obtained information regarding baby's weight at birth from mother's recall. Among children born in the five years preceding the survey, 7 percent weighed less than 2.5 kilograms (as opposed to 8 percent in 1998), while majority (93 percent) of births weighed 2.5 kg or more (as opposed to 88 percent in 1998).

The proportion of low birth weight babies (weighed less than 2.5 kilograms) decreases with increasing mothers' age, dropping from 8 percent among babies born to mothers under age 20 years, to 5 percent among women age 35 and over.

The proportion of low birth weight babies is higher in rural areas (7 percent) than in urban areas (6 percent). Eight percent of babies born each in the Central and the Western regions were born low weight, as compared to 5 percent each in Ulaanbaatar and the Eastern region.

In addition, a relatively higher proportion of women with primary educational levels (9 percent) and those with incomplete secondary educational levels (8 percent) gave birth to had low birth weight infants.

The survey also gathered information reflecting on the mother's opinion on whether the delivery occurred at term, preterm or post-date. Overall, 75 percent of births were delivered at term, 13 percent preterm, and 12 percent post-date.

Table 8.08 Percent Distribution of Live Births in the Last 5 Years by Whether the Delivery Was by Caserean Section, and by Birth Weight and the Mother's Opinion on Timing of Birth, by Selected Background Characteristics, Mongolia 2003

Background Characteristics	Delivery by Caserean Section	Weight at birth				Timing of birth					Number of Births
		Less than 2.5 kg	2.5 kg or More	DK/ Missing	Total	On time	Prematurely	Post Date	DK	Total	
Age at Birth											
<20	3.9	8.1	90.8	1.0	100.0	67.5	17.8	14.4	0.3	100.0	381
20-34	9.0	6.6	92.6	0.8	100.0	76.7	12.1	11.2	0.0	100.0	3 008
35+	22.0	5.3	94.7	0.0	100.0	72.7	13.0	14.3	0.0	100.0	322
Residence											
Urban	13.5	5.8	93.9	0.3	100.0	73.7	13.8	12.5	0.0	100.0	1 611
Rural	6.6	7.3	91.7	1.0	100.0	76.7	12.0	11.3	0.0	100.0	2 100
Region											
Central	8.5	7.5	91.9	0.6	100.0	72.2	14.3	13.4	0.1	100.0	1 259
East	8.5	5.1	94.3	0.6	100.0	73.8	13.7	12.5	0.0	100.0	351
West	4.7	7.9	90.7	1.4	100.0	84.0	8.9	7.1	0.0	100.0	933
South	9.7	5.5	94.1	0.3	100.0	71.0	16.2	12.8	0.0	100.0	290
Ulaanbaatar	16.9	5.1	94.5	0.3	100.0	72.8	13.2	14.0	0.0	100.0	878
Highest Education Level											
Less than Grade 4	6.7	9.4	89.4	1.2	100.0	77.8	10.6	11.3	0.2	100.0	406
Grade 4-8	5.8	8.1	90.7	1.3	100.0	76.7	12.9	10.4	0.0	100.0	1 018
Grade 9-10	10.6	6.7	92.8	0.5	100.0	74.4	13.7	11.9	0.0	100.0	1 141
More than Grade 10	13.1	4.5	95.3	0.3	100.0	74.3	12.6	13.2	0.0	100.0	1 146
Total	**9.6**	**6.7**	**92.6**	**0.7**	**100.0**	**75.4**	**12.8**	**11.8**	**0.0**	**100.0**	**3 711**

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 almost one million women die due to pregnancy and childbirth complications, and out of this number 99 percent of deaths occur in the developing countries (ICPD Program of Action).

Table 8.09 presents information on live births in the last 5 years which experienced have complications associated with delivery by type of complications and antenatal and delivery care. It is noted that these are self-reported data based on the women's responses. There were no self-reported complications associated with deliveries in 47 percent of births in the last five years preceding the survey. Among births with complications at delivery, one third (33 percent) of them are from

mothers who received oxytocin (uterine contraction-enhancing drug), 30 percent of them had prolonged labor (deliveries lasted more than 12 hours),16 percent required blood and blood volume expansion infusions, 8 percent from mothers with elevated blood pressure, and 8.0 percent reported excessive bleeding. Surprisingly, a sizeable proportion (25 percent) of births that had complications at delivery had neither received ANC nor were delivered at a health facility. It is worth to mention was that deaths of babies during the first week following birth are often caused by delivery complications.

Table 8.09 Percentage of Live Births in the Last 5 Years with Complications at Delivery, According to Antenatal and Delivery Care, Mongolia 2003

Variable and Category	Complications at Delivery						Number of Births
	Needed Oxytocin Injection	Prolonged Labor	Excessive Bleeding	Had Blood or Substituting Solution	High Blood Pressure	None	
Medical Maternity Care							
Both	33.8	30.4	7.7	15.6	8.2	46.6	3 414
Antenatal	2.4	14.6	7.3	12.2	2.4	70.7	41
Delivery	32.9	29.6	12.1	18.8	10.0	42.5	240
None	0.0	12.5	6.3	12.5	12.5	75.0	16
Early Neonatal Death							
No	33.3	30.1	7.9	15.7	8.2	46.7	3 694
Yes	17.6	35.3	17.6	29.4	11.8	52.9	17
Premature Birth							
On time	31.4	28.9	7.7	14.0	7.2	48.6	2 797
Prematurely	30.8	28.5	7.8	19.0	11.4	47.5	474
Post date	48.1	39.6	10.3	23.2	11.8	33.5	439
DK	0.0	0.0	0.0	0.0	0.0	100.0	1
Total	**33.3**	**30.1**	**8.0**	**15.7**	**8.2**	**46.7**	**3 711**

Among women who reported giving birth at term, 31 percent of deliveries received oxytocin injections and 29 percent had prolonged labor (more than 12 hours), while among women delivered post-date, the percentages were 48 and 40 percent respectively.

Births from adolescent mothers have more complications associated with delivery (57 percent) than other older age groups. Over one third (36 percent) of births among adolescent mothers aged less than 20 years or younger were delivered with prolonged labor during delivery while another one third neede oxytocin injections (Table 8.10). Half of urban births (51 percent) and 44 percent of rural births had no complications at delivery. Geographically, the prevalence of deliveries no complications is lowest in the Eastern region (43 percent) and highest in Ulaanbaatar (53 percent).

Table 8.10 Percentage of Live Births in the Last 5 Years Preceding the Survey for Which Complications at Delivery, According to Background Characteristics, Mongolia 2003

Background Characteristics	Complications at Delivery						Number of Births
	Needed Oxytocin Injection	Prolonged Labor	Excessive Bleeding	Had Blood or Substituting Solution	High Blood Pressure	None	
Age at Birth							
<20	33.3	36.0	7.3	13.9	9.4	43.0	381
20-34	32.8	30.2	8.0	15.8	8.2	46.7	3 008
35+	37.3	22.7	8.4	17.4	7.5	50.9	322
Residence							
Urban	33.0	27.3	6.3	14.2	6.8	50.5	1 611
Rural	33.5	32.3	9.3	17.0	9.3	43.8	2 100
Region							
Central	33.8	29.8	8.3	17.5	8.9	44.8	1 259
East	35.9	34.5	9.4	13.4	8.5	42.5	351
West	34.4	34.3	10.0	17.5	9.3	44.1	933
South	22.8	30.0	7.2	11.7	6.6	50.3	290
Ulaanbaatar	33.7	24.5	5.1	13.7	6.6	52.7	878
Highest Education Level							
Primary or less	29.1	32.0	6.2	12.6	8.6	46.1	406
Incomplete secondary	31.5	31.1	9.0	17.4	8.1	45.7	1 018
Complete secondary	34.3	32.5	8.0	15.1	7.6	46.0	1 141
More than Secondary	35.3	26.2	7.7	16.1	8.9	48.5	1 416
Total	**33.3**	**30.1**	**8.0**	**15.7**	**8.2**	**46.7**	**3 711**

Post-partum counseling

The present survey also gathered data on whether the woman respondents received post-partum counseling within 42 days after birth and, if they had received it, what kind of counseling has been provided. Table 8.11 presents the percentage of most recent births within the last 5 years by type of counseling advice given by doctors within 42 days after birth. Among most recent births within the last five years, 62 percent of mothers were provided with counseling by a medical doctor within 42 days after birth. The percentage of births by types of counseling advice given to mothers shows that 60 percent received counseling on breastfeeding, 59 percent on newborn care, 37 percent on family planning and 32 percent on prevention of sexually transmitted infections.

In terms of woman age at birth, births to women aged 20-34 years accounted for a higher share of various counseling advice by doctors than other age groups: 61 percent for breastfeeding, 60 percent for neonatal care and 38 percent for family planning. Mothers of urban areas births received more counseling advice with rural area, 70 percent versus 56 percent. The proportion of births to women who had been counseled is highest in the Eastern region (72 percent). The proportion of births to women who receiving advice increases with increasing level of education of women, rising from 49 percent among women with a primary educational level to 70 percent among women with a higher than secondary education.

Table 8.11 Percentage of Most Recent Live Births in the Last 5 Years preceding the survey by type of Councelling Advice Given by Doctors Within 42 Days After Birth, According to Background Characteristics, Mongolia 2003

Background Characteristics	Doctor's Advice Within 42 Days					Number of Births
	Yes	Breastfeeding	Neonatal Care	Family Planning	STD	
Age at Birth						
<20	54.0	51.6	50.9	29.5	24.6	285
20-34	63.5	60.6	60.3	37.6	33.0	2 491
35+	61.6	58.7	59.4	39.7	33.9	310
Residence						
Urban	70.4	67.5	67.5	40.4	32.4	1 405
Rural	55.8	52.9	52.6	34.3	32.3	1 681
Region						
Central	63.1	60.4	59.8	39.6	39.3	1 041
East	72.3	67.0	68.3	43.2	36.0	303
West	55.6	52.8	52.0	36.7	31.0	712
South	50.4	47.9	47.9	28.2	27.3	238
Ulaanbaatar	67.6	65.2	65.4	34.5	24.5	792
Highest Education Level						
Primary or less	48.9	45.0	44.7	26.4	25.4	311
Incomplete secondary	54.2	51.7	50.5	33.0	28.5	806
Complete secondary	65.4	62.6	63.2	38.6	33.2	958
More than Secondary	70.3	67.4	67.4	42.1	36.7	1 011
Total	**62.4**	**59.6**	**59.4**	**37.1**	**32.3**	**3 086**

Fever and Acute Respiratory Infections (ARI)

The RHS included questions on whether the children under the age of 5 years had symptoms such as coughing, fever, and pneumonia, and had any counseling or treatment by a doctor during two weeks prior to the survey. Table 8.12 shows that 28 percent of the children had a cough and 11 percent had fever during two weeks prior to the survey. The prevalence of fever, cough and short/rapid breath is highest among babies age 6-11 months compared to other age groups, 39 percent having cough, 17 percent having fever and 5 percent breathing faster than normal (Table 8.12). Boys were more likely to get with fever and ARI than girls. Similarly, more urban children had fevers and ARI than rural children. Among regions, the Ulaanbaatar has highest proportion of children suffering from fever and ARI, for example, 56 percent of Ulaanbataar children had a cough and a fever and its rate or prevalence is much higher than that in other regions.

Table 8.12 Among All Children Under 5 Years of Age, the Percentage Who Were Ill with Fever, Cough and Short Rapid Breath, and the Percentage Those Ill Who Had Contact with a Health Facility and Who had Visited Place of for Advice/Treatmemt According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Fever	Cough	Short and Rapid Breath	Place for Advice/Treatment							Number of Children
				Taken to Health Facilities/ Treatment	Public Hospital	Private Hospital	Pharmacy	Traditional Doctor	Friend (Doctor)	None	
Child's Age											
Under 6 Months	6.0	24.1	1.1	80.7	79.8	0.9	5.7	0.0	1.4	19.3	352
6-11 Months	17.3	38.6	4.5	88.5	85.8	1.8	6.0	0.0	1.3	11.5	381
12-23 Months	14.8	32.9	2.3	88.3	87.4	2.2	6.7	0.0	1.2	11.7	684
24-35 Months	10.1	24.7	1.9	88.0	86.7	1.0	6.5	0.1	1.2	12.0	675
36-47 Months	10.6	25.1	1.9	84.2	83.2	0.5	8.0	0.0	1.2	15.8	774
48-59 Months	9.1	23.7	0.6	85.6	84.6	0.8	8.0	0.3	0.8	14.4	727
Child's Sex											
Male	12.1	28.6	2.2	85.2	83.8	1.3	6.6	0.1	1.0	14.8	1 836
Female	10.4	26.4	1.6	87.0	86.0	1.0	7.5	0.1	1.3	13.0	1 757
Residence											
Urban	14.6	33.5	2.5	88.8	86.7	2.5	9.6	0.0	1.9	11.2	1 565
Rural	8.7	23.0	1.5	84.0	83.5	0.1	5.1	0.1	0.6	16.0	2 028
Region											
Central	9.5	29.3	1.4	86.6	85.6	0.4	6.2	0.0	0.9	13.4	1 219
East	9.8	26.3	2.1	90.2	88.5	1.2	2.1	0.0	1.5	9.8	338
West	8.3	17.7	1.6	80.6	79.8	0.1	8.8	0.3	0.3	19.4	900
South	7.4	24.8	0.4	88.7	88.7	0.0	1.4	0.0	0.0	11.3	282
Ulaanbaatar	18.6	36.9	3.5	88.6	86.5	3.7	10.2	0.0	2.6	11.4	854
Highest Education Level											
Primary or less	9.8	22.3	2.8	80.6	80.3	0.3	5.2	0.0	1.6	19.4	386
Incomplete secondary	8.4	21.9	2.2	84.6	83.7	0.5	5.2	0.0	0.5	15.4	975
Complete secondary	11.6	29.8	1.5	86.6	85.6	0.7	6.5	0.1	1.0	13.4	1 108
More than Secondary	13.9	32.0	1.8	88.7	86.8	2.5	9.8	0.2	1.7	11.3	1 124
Total	**11.2**	**27.6**	**1.9**	**86.1**	**84.9**	**1.2**	**7.0**	**0.1**	**1.1**	**13.9**	**3 593**

As for the medical assistance and place of advice/treatment, 86 percent of children were taken to a health facility for advice/treatment on fever and ARI, while 85 percent received care from public hospitals, 7 percent from pharmacies, one percent sought assistance at private clinics and one percent approached friends who were medical doctors. The remaining 14 percent of children are from mothers who did not received any type of assistance.

Diarrhea Prevalence and its Treatment

The RHS also obtained data on prevalence of diarrhea and its treatment. Diarrhea diseases constitute one of the leading causes of childhood morbidity and mortality. Child's health can be largely dependent on multiple factors such as parental educational level, particularly on maternal educational level, spacing between childbirths, birth order, and maternal age, among others.

The percentage of children less than five years old with diarrhea or dysentery (with blood in the stools) during two weeks prior to the survey by the age, sex, residence, region, maternal educational level, and type of remedies taken at the household is shown on Table 8.13. The prevalence or percentage of children who had diarrhea in 2 weeks preceding the survey is 13 percent, while the prevalence of bloody diarrhea is about one percent. This prevalence of diarrhea is higher than the that in 1998 (9 percent), an increase of 36 percent. The prevalence of diarrhea within the 2 weeks preceding the survey is highest among children age 6-11 months (23

percent), when compared to other age groups. By sex, boys (14 percent) are more affected than girls (12 percent). By residence, rural children (14 percent) suffered more than urban counterparts (11 percent). The highest prevalence of diarrhea is found in the Central region (16 percent) and the lowest in Ulaanbaatar (10 percent).

Medical assistance was sought by 81 percent of children with diarrhea, 79 percent of these children attending public hospitals/clinics, 6 percent visiting pharmacies, and the remaining children received treatment/advice from traditional healers, friend-doctors or others. The percentage of children who received medical assistance for their diarrhea is slightly higher in the urban areas (83 percent) than rural areas (79 percent).

Table 8.13 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 2003

Variable and Category	Diarrhea Previous 2 Weeks	Bloody Diarrhea Previous 2 Weeks	Seeking Medical Treatment/ Assistance	Place of Treatment/Advice for Diarrhea						Number of Children
				Public hospital	Private hospital	Pharmacy	Traditional Doctor	Friend (Doctor)	Other	
Child's Age										
Under 6 Months	15.3	1.7	73.3	71.9	0.6	5.1	1.1	0.6	0.0	352
6-11 Months	22.6	0.8	81.6	79.5	1.8	4.2	1.0	1.0	0.3	381
12-23 Months	18.9	0.7	83.3	82.3	2.0	6.0	0.7	0.9	0.0	684
24-35 Months	11.1	1.0	83.0	81.6	1.0	6.4	0.7	0.9	0.3	675
36-47 Months	7.4	0.8	78.2	76.6	0.8	6.5	1.2	1.3	0.3	774
48-59 Months	8.0	0.7	81.6	80.3	1.0	6.7	1.1	1.2	0.4	727
Child's Sex										
Male	13.5	0.8	79.2	77.6	1.2	5.7	0.8	1.1	0.2	1 836
Female	12.1	1.0	82.1	81.0	1.2	6.4	1.1	1.0	0.3	1 757
Residence										
Urban	11.2	0.8	82.7	80.3	2.7	8.0	0.8	1.5	0.3	1 565
Rural	14.0	1.0	79.0	78.4	0.0	4.5	1.1	0.7	0.2	2 028
Region										
Central	16.3	1.2	82.4	81.7	0.4	5.9	0.2	0.7	0.2	1 219
East	12.4	0.9	80.5	77.5	2.1	0.3	1.2	1.8	0.0	338
West	11.4	0.8	79.3	78.6	0.0	8.2	2.6	0.9	0.3	900
South	11.0	0.4	81.6	81.6	0.0	0.4	0.0	0.0	0.0	282
Ulaanbaatar	9.8	0.7	79.3	76.3	3.6	8.1	0.7	1.8	0.2	854
Highest Education Level										
Primary or less	17.1	1.3	76.7	76.4	0.3	4.4	1.6	0.0	0.0	386
Incomplete secondary	13.9	0.7	76.5	75.4	0.5	4.2	0.6	0.7	0.2	975
Complete secondary	11.6	1.1	82.9	81.3	1.0	6.1	1.1	1.2	0.4	1 108
More than secondary	11.4	0.7	83.4	81.5	2.3	8.1	1.0	1.5	0.2	1 124
Total	**12.8**	**0.9**	**80.6**	**79.2**	**1.2**	**6.0**	**1.0**	**1.0**	**0.2**	**3 593**

In the Table 8.14, more than three quarters (80 percent) of children who had diarrhea within the 2 weeks prior to the survey were taken to a health facility for treatment. More female children (82 percent) were taken to a health facility than male children (79 percent). Similarly, more rural children (82 percent) were taken to a health facility than urban children (77 percent). Among regions, the Central region appeares to have the highest prevalence of using a health facility (88 percent). There are some variation in the proportion of children taken to a health facility by other's educational level.

Table 8.14 also shows the various treatments that were given to children with diarrhea. About two thirds (65 percent) of children who had diarrhea were given

antibiotic pills, while 53 percent of these children received oral re-hydration saline (ORS) solution, and 42 percent were provided with an abundant supply of varying home-made drinks of different types, 12 percent were given drinks prepared by boiling herbs and other plants.

More urban women used Oral Re-hydration Saline (ORS) solutions and abundant home-made drinks to treat diarrhea, while more rural women used drugs (antibiotics), injections, and herbal remedies.

Table 8.14 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 2003

Background Characteristics	Taken a Health Facility	Diarrhea Treatment									Children with Diarrhea
		ORS	Pill (antibiotics)	Injection	I. V Intravenous	Home-made Drinks	Home Med/ Herb.Med	Other	None	DK/ Missing	
Child's Age											
Under 6 Months	72.2	33.3	46.3	1.9	1.9	18.5	7.4	0.6	31.5	3.7	54
6-11 Months	88.4	62.8	64.0	0.0	0.0	48.8	8.1	1.0	3.5	0.0	86
12-23 Months	79.1	57.4	65.1	0.0	0.8	38.8	15.5	0.9	3.9	0.0	129
24-35 Months	86.7	61.3	70.7	5.3	0.0	48.0	10.7	0.9	4.0	0.0	75
36-47 Months	75.4	36.8	75.4	1.8	0.0	40.4	10.5	1.3	7.0	0.0	57
48-59 Months	74.1	48.3	62.1	1.7	0.0	53.4	15.5	1.2	3.4	0.0	58
Child's Sex											
Male	78.5	52.6	62.3	2.0	0.8	44.5	11.7	1.1	7.3	0.0	247
Female	82.1	52.4	67.0	0.9	0.0	38.7	11.8	1.0	7.5	0.9	212
Residence											
Urban	77.3	61.4	60.8	1.1	0.6	46.0	10.2	1.5	4.5	0.0	176
Rural	82.0	47.0	66.8	1.8	0.4	39.2	12.7	0.7	9.2	0.7	283
Region											
Central	87.9	48.2	68.3	2.5	0.5	43.7	13.6	0.7	8.0	1.0	199
East	76.2	52.4	40.5	0.0	0.0	45.2	9.5	1.8	11.9	0.0	42
West	73.8	45.6	69.9	1.0	0.0	42.7	11.7	0.9	8.7	0.0	103
South	74.2	67.7	51.6	0.0	0.0	25.8	6.5	0.0	6.5	0.0	31
Ulaanbaatar	73.8	65.5	65.5	1.2	0.1	40.5	10.7	1.8	2.4	0.0	84
Highest Education Level											
Primary or less	75.8	37.9	66.7	4.5	0.0	33.3	16.7	0.0	13.6	0.0	66
Incomplete secondary	83.1	44.9	67.6	1.5	0.7	45.6	13.2	0.7	5.9	0.0	136
Complete secondary	77.5	60.5	62.8	0.8	0.0	40.3	10.1	1.2	6.2	1.6	129
More than secondary	82.0	60.2	61.7	0.8	0.8	43.8	9.4	1.5	7.0	0.0	128
Total	**80.2**	**52.5**	**64.5**	**1.5**	**0.4**	**41.8**	**11.8**	**1.0**	**7.4**	**0.4**	**459**

It is important that children with diarrhea are given sufficient liquids to prevent dehydration. As shown in Table 8.15, two thirds (67 percent) of children aged five years and under old with diarrhea drank increased their fluid intakes. This percentage is 4 points higher than that in the 1998 RHS (63 percent). Accordingly, 23 percent of children drank the usual amount of liquids, while 9 percent drank less.

Table 8.15 Provision of Fluids to Children Under Five Years Who Had Diarrhea in the Past Two Weeks, Mongolia 2003

	Total	
	1998 RHS	2003 RHS
Increase or Decrease Fluids		
Same	26.3	23.3
Increase	63.0	66.7
Decrease	9.5	8.7
DK/Missing	1.2	1.3
Total	**100.0**	**100.0**
Number of Births	338	459

Summary and conclusion

The proportion of pregnant women seeking Antenatal (Prenatal) Care (ANC), has increased from 96 percent in 1998 to 99 percent in 2003. Similarly, ANC provided by specialist genecologists also has increased from 48 percent in 1998 to 53 percent in 2003. At the same time, the median for the first antenatal visits has reduced from 3.7 months in 1998 to 3.3 months in 2003. These survey findings indicate that, overall, the ANC and delivery services, which are an important part of the primary health-care system, appear to be functioning adequately.

Survey shows that iron deficiency anemia is very common among reproductive age women; therefore, its prevention and treatment of iron deficiency anemia need urgent attention from Health Authorities and related agencies.

Percentage of deliveries at health facilities has increased from 94 percent in 1998 to 97 percent in 2003. Correspondingly the proportion of births delivered by health professionals also has increased from 94 percent in 1998 to 97 percent in 2003.

The prevalence of diarrhea within the 2 weeks period preceding the survey increased from 9 percent in the 1998 RHS to 13 percent in the 2003 RHS. However, it encouraging to note, is that 80 percent of these children with diarrhea were taken to a health facility for treatment or consultation. This percentage has been substantially increased from 67 percent of children with diarrhea taken to a health facility in 1998 RHS. Remain of children with diarrhea were not taken to a health facility for treatment or consultation, it might be relate to their parents learned to home remedy for child diseases complex management.

The prevalence of diseases associated with pregnancies has substantially increased from the 1998 level, which should be addressed accordingly.

High proportion of women who received post-partum counseling regarding on breastfeeding and ANC may have contributed significantly to the improvement in the child health and reduction of infant and child mortality. This high achievement should be maintained and further improved, wherever possible.

CHAPTER IX

BREASTFEEDING*

Saranchimeg Byamba and Regzmaa Gongor

As it has been mentioned in the previous chapter, a substantial improvement of main health indicators in recent years, such as infant and child mortality, may have been influenced by a number of factors, including the introduction of international standards on diagnosis of acute respiratory infections and diarrheic diseases, promotion of breastfeeding, and successful implementation of the national vaccination programme.

In the Programme of Action of the ICPD 1994, Cairo, breastfeeding was stated as one of the integral components of reproductive health services.

Breastfeeding is very important for the health of both mother and the child, as it benefits child's nutrition and development. Thus, it is widely recommended to feed the infant only with breast milk up to six months of age. The mother is also benefited by the contraceptive effect of breastfeeding, and it contributes to increased birth spacing and hence influences fertility rates. These effects are influenced by both the duration and frequency of breastfeeding, and by the age when the child starts to receive supplemental foods and liquids.

Therefore, factors such as, starting breastfeeding immediately after the birth, breastfeeding itself, causes of not breastfeeding, and whether the infants received only breast milk or drink food supplements and liquids, and causes of stopping breastfeeding were included in the questionnaire.

Time of first breastfeeding

Table 9.01 shows initial breastfeeding status of all children who were born within the three years before the survey (or in years 2000-2003), categorized by sex, residence and mother's educational level. Over 98 percent of the last born children born (within 3 years preceding the survey) were breastfed 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.

Breastfeeding is the first step to follow after childbirth, thus the information on whether the newborn was immediately breastfed after the birth was gathered in the present survey. As the results show, 78 percent last-born children born 3 years preceding the survey were breastfed within first 30 minutes after the birth, 8 percent within one hour, 10 percent within 24 hours, and 3 percent after 24 hours (Table 9.01). Majority of children (78 percent) who were born in a health facility or hospital

* For easy reading and comprehension of the text for the comparison of two surveys (RHS 1998 and RHS 2003), periods (3-year or 5-year) covered in RHS 1998 are reffered as 1998, and periods (3-year or 5-year) covered in RHS 2003 as 2003. Readers can obtain the actual periods covered from the related tables.

were breastfed within the first 30 minutes after the birth, compared with 68 percent among children born at home.

Table 9.01 Percentage of Children Born in the Three Years Before the survey Who Were Ever Breastfed, and the Percentage of Last-born Children Who started Breasrfeeding by time since birth , According to Background Characteristics, Mongolia, 2003

Background Characteristics	Percentage ever breastfed	By time since birth					Number of Children
		Within first 30 minutes	Within 60 30 minutes	Within 24 hours	More than 24 hours	Don't remember	
Sex							
Male	98.2	75.8	8.2	10.3	3.7	0.3	1 027
Female	99.1	79.4	7.5	9.3	2.9	0.0	974
Residence							
Urban	98.3	78.8	7.0	9.6	2.8	0.1	892
Rural	98.9	76.5	8.6	10.0	3.7	0.2	1 109
Region							
Central	98.9	77.5	6.4	10.5	4.3	0.1	716
East	96.8	77.7	5.1	7.0	7.0	0.0	157
West	99.1	77.7	12.2	7.7	1.5	0.0	466
South	99.4	81.6	5.1	9.5	2.5	0.6	158
Ulaanbaatar	98.2	76.0	7.5	11.9	2.6	0.2	504
Mother's Education Level							
Primary or less	99.2	68.1	14.7	13.0	2.5	0.8	238
Incomplete secondary	98.1	79.0	7.2	8.7	3.2	0.0	528
Complete secondary	98.4	79.5	6.2	8.7	3.9	0.0	611
More than secondary	99.2	77.9	7.4	10.7	3.0	0.2	624
Place of Delivery							
Health Facility	98.6	77.7	7.8	9.8	3.2	0.2	1 957
At Home	100.0	68.2	11.4	13.6	6.8	0.0	44
Total	**98.7**	**77.5**	**7.8**	**9.8**	**3.3**	**0.1**	**2 001**

Breastfeeding

Breastfeeding shortly after the birth is an important step in correct breastfeeding for the newborn and mother, and the learning how to breastfeed correctly is an integral part of successful breastfeeding.

Among children born within the three years before the survey, virtually all of children (99 percent) are breastfed for at least some time and only 1 percent of them did not(Table 9.02).

Compared to the 1998 survey, the proportion of children who were breastfed increased by 2 points, from 97 percent in 1998 to 99 percent in 2003. The increasing proportion of women who received antenatal, delivery care and postpartum counseling, including the proportion of them who received counseling regarding on breastfeeding, this may have contributed to high level of breastfeeding.

Table 9.02 also shows that the percentage of children who were breastfed varies little by sex, residence, region, mother's educational level, and place of delivery.

Table 9.02 Percentage of All Children Who Were Ever Breastfed Among children Born in the Three Years Before the Survey , According to Background Characteristics, Mongolia 2003

Background Characteristics	Breastfeeding		Number of Children
	Ever Breastfed	Never Breastfed	
Sex			
Male	98.2	1.8	1 091
Female	99.0	1.0	1 048
Residence			
Urban	98.1	1.9	944
Rural	98.9	1.1	1 195
Region			
Central	98.8	1.2	768
East	97.0	3.0	165
West	99.0	1.0	513
South	99.4	0.6	168
Ulaanbaatar	97.9	2.1	525
Mother's Education Level			
Primary or less	99.2	0.8	258
Incomplete secondary	97.9	2.1	574
Complete secondary	98.2	1.8	652
More than secondary	99.2	0.8	655
Place of Delivery			
Health Facility	98.5	1.5	2 092
At Home	100.0	0.0	47
Total	**98.6**	**1.4**	**2 139**

The main causes of children never breastfed (born within the three years prior to the survey) are: death of the child, lack of milk, deteriorated health of the mother, pain in the breasts and other.

Table 9.03 presents information on breastfeeding status of living children under the age of 3 years by the child's age in months. Among children of 0-1 month of age, 95 percent of were exclusively breastfed, 3 percent received food supplements, while the other 3 percent were never breastfed. At 0-3 months of age, 94 percent of children are exclusively breastfed, 4 percent are breastfed with supplements, but only about 1 percent are not breastfeeding.

Table 9.03 Percent Distribution of Living Children by Breastfeeding Status, According to Child's Age in Months, Mongolia, 2003

Months Since Birth	Breastfeeding Status					Number of Living Children
	Not Breastfeeding	Exclusive Breastfeeding	Breast/ Plain Water	Breast/ Supplement	Total	
0-1	2.6	94.8	0.0	2.6	100.0	77
2-3	0.7	94.2	0.0	5.0	100.0	139
4-5	5.9	76.5	0.0	17.6	100.0	136
6-7	3.2	34.4	0.0	62.4	100.0	125
8-9	6.3	18.8	0.0	75.0	100.0	128
10-11	6.3	8.6	0.0	85.2	100.0	128
12-13	15.8	9.0	0.0	75.2	100.0	133
14-15	13.8	3.3	0.8	82.1	100.0	123
16-17	18.1	6.9	0.0	75.0	100.0	116
18-19	26.3	3.4	0.0	70.3	100.0	118
20-21	29.8	2.1	0.0	68.1	100.0	94
22-23	34.0	3.0	0.0	63.0	100.0	100
24-25	46.3	1.9	0.0	51.9	100.0	108
26-27	50.0	0.0	0.0	50.0	100.0	122
28-29	55.0	0.0	0.0	45.0	100.0	109
30-31	65.5	0.8	0.0	33.6	100.0	119
32-33	67.0	0.0	0.0	33.0	100.0	97
34-35	72.5	0.0	0.0	27.5	100.0	120
Age in Months						
0-3	1.4	94.4	0.0	4.2	100.0	216
0-6	6.2	84.8	0.0	9.0	100.0	477
4-6	5.0	66.2	0.0	28.9	100.0	201
7-9	5.3	20.2	0.0	74.5	100.0	188
Total	**27.9**	**20.2**	**0.0**	**51.9**	**100.0**	**2 092**

Table 9.04 shows that about 85 percent of children who are exclusively breastfed were up to 6 months of age. By residence, the proportion of rural women, who exclusively breastfed their children up to 6 months of age was 87 percent. This percentage was higher than that of their urban counterparts (82 percent). The proportion of women in the Western region (90 percent) and the proportion of women with a primary education (88 percent) who breastfed their children until they were 6 months of age were the highest. Moreover, 85 percent of women who gave birth at hospitals fed their children exclusively with breast milk until 6 months of age.

Table 9.04 Among Children Who Were Ever Breastfed for More than 6 Months in the Three Years Before the Survey , the Percentage of Children Who Were Fed only by Breast milk for First 6 Months After Births, According to Background Characteristics, Mongolia 2003

Background Characteristics	Only by breast milk for first 6 months			Number of Children
	Yes	No	Don't remember	
Sex				
Male	83.0	16.9	0.1	846
Female	86.6	13.3	0.1	829
Residence				
Urban	81.5	18.5	0.0	726
Rural	87.2	12.5	0.2	949
Region				
Central	81.5	18.2	0.3	606
East	89.0	11.0	0.0	127
West	90.3	9.7	0.0	403
South	86.7	13.3	0.0	128
Ulaanbaatar	82.2	17.8	0.0	411
Mother's Education Level				
Primary or less	88.2	11.3	0.5	204
Incomplete secondary	87.7	12.3	0.0	463
Complete secondary	85.1	14.9	0.0	483
More than secondary	80.6	19.2	0.2	525
Place of Delivery				
Health Facility	84.8	15.1	0.1	1 634
At Home	82.9	17.1	0.0	41
Total	**84.8**	**15.1**	**0.1**	**1 675**

The percentage of children who were breastfed decreased as the with increasing age of the child increased, and by the age of 1 year, 76 percent of children received breast milk and supplementary food. Of the children at aged 26-27 months, half of children were still breastfeeding, and about 73 percent of children at aged of 34-35 months have stopped breastfeeding.

According to the World Health Organization (WHO) recommendations, for the first 6 months a baby should be exclusively breastfed. As shown, in the lower part of the table, 94 percent of children aged 0-3 months, and 85 percent of children aged 0-6 months were fed exclusively with breast milk. In general, it can be highlighted that Mongolian mothers comply well with WHO recommendations.

Table 9.05 shows median duration of breastfeeding by child's sex, residence, region and mother's educational level. The term 'exclusive' breastfeeding means that the child receives only breast milk, while "full" breastfeeding allows the child to have plain water only in addition to breast milk.

Overall, the median duration of any breastfeeding of Mongolian mothers is rather long (25.9 months), while the duration of exclusive breastfeeding and full breastfeeding are short (5.9 months each). Figures are higher than those in 1998 by 0.7, 2.4 and 2.3 months, respectively. The median duration in months of breastfeeding is slightly higher among rural residents (26.6 months) compared to urban residents (25.7 months) and it is also higher in the Western region (28.7 months) compared to

other regions (16.5-25.1 months). On average, Mongolian women breastfeed their children for slightly over two years (26 months), which is rather lengthy when compared with other countries in the region.

Table 9.05 Median Durations of Any Breastfeeding, Exclusive and Full Breastfeeding Among Children Under 3 Years of Age, According to BackgroundCharacteristics, Mongolia, 2003

Background Characteristics	Median Breastfeeding Durations in Months			Number of Children under 3 years of age
	Breastfeeding	Exclusive Breastfeeding	Full Breastfeeding	
Sex				
Male	27.1	5.6	5.6	1 091
Female	25.2	6.4	6.4	1 048
Residence				
Urban	25.7	5.8	5.8	944
Rural	26.6	6.1	6.1	1 195
Region				
Central	25.1	5.1	5.1	768
East	16.5	6.9	6.9	165
West	28.7	6.6	6.6	513
South	20.7	6.8	6.8	168
Ulaanbaatar	26.3	5.9	5.9	525
Mother's Education Level				
Primary or less	25.5	6.1	6.1	258
Incomplete secondary	26.6	6.3	6.3	574
Complete secondary	25.4	5.9	5.9	652
More than secondary	27.1	5.7	5.7	655
Total	**25.9**	**5.9**	**5.9**	**2 139**
Mean	25.3	7.3	7.3	98.6
Prevalence-Incidence Mean	25.0	7.0	7.0	

Median duration of breastfeeding is nearly the same as the mean duration, was as well as the epidemiological indicator ‘prevalence-incidence mean’ duration, while the median duration of exclusive breastfeeding is deviated from the mean duration by approximately one month.

Table 9.06 shows the percentage of breastfeeding children, less than 36 months of age, who receiving food supplementation in 24 hours before interview by child’s age and type of supplementation. When the data is compared to the 1998 results, the proportion of children who received food and fluid supplements reduced at all age groups and types of supplements, which can be related to the extension of median duration of exclusive and full breastfeeding by about 2.4 months as mentioned above.

Table 9.06 Percentage of Breastfeeding Children under 36 Months of Age, by type of Food Supplementation Received in 24 Hours Before the Interview, According to Child's Age in Months, Mongolia, 2003

Age in Months	Type of Supplementation				Number of Breastfeeding Children
	Plain Water	Tinned or Fresh milk	Other Liquid	Solid/Mushy Food	
Months Since Birth					
0-1	1.3	1.3	1.3	1.3	75
2-3	0.0	3.6	0.7	0.7	138
4-5	3.1	11.7	12.5	8.6	128
6-7	17.4	28.1	60.3	54.5	121
8-9	25.0	34.2	75.8	80.0	120
10-11	31.7	38.3	84.2	87.5	120
12-13	31.3	34.8	85.7	88.4	112
14-15	34.0	47.2	93.4	95.3	106
16-17	22.1	36.8	91.6	90.5	95
18-23	37.9	42.5	94.1	95.0	219
24-29	43.5	47.0	97.6	98.2	168
30-35	38.7	45.3	96.2	98.1	106
Age in Months					
0-3	0.5	2.8	0.9	0.9	213
4-6	5.2	16.2	24.6	20.4	191
7-9	25.3	33.1	74.7	75.3	178
Total	**25.4**	**32.2**	**68.8**	**69.2**	**1 508**

Supplementation with tinned/fresh milk, other liquids and other mushy food starts early. Mongolian infants, especially after 4 months, mainly have water, tea with milk and boiled milk with water as fluid, and a mushy soup with wheat flour as food supplements.

By the age of 6-7 months, over one fourth of the breastfeeding children received tinned/fresh milk (28 percent), six tenths received other liquids (60 percent), and over half received solid (55 percent). We can therefore conclude that breastfeeding practices in Mongolia deserve high commendation children receive breast milk for an extended period, and receive proper food supplementation at an early age. This may most probably contribute to lowering of infant and child mortality.

Summary and conclusion

More than three fourths of children (78 percent) are breastfed within 30 minutes after births. The proportion of children who were breastfed for at least some time has increased from 97 percent in 1998 to 99 percent in 2003.

Over half (60 percent) of most recent births to mothers, who had obtained postpartum advice counseling from a doctor, receives counseling specifically on breastfeeding, which may have contributed to the increased and sustained duration of breastfeeding.

Breastfeeding practices in Mongolia deserve high commendation as large proportion of children receive breast milk from their mothers for an extended and

sustained period of time and receive proper food supplementation at early age. This factor may contribute to may most probably lower infant and child mortality rates, particularly the neo-natal mortality.

The median duration of any breastfeeding has increased slightly from 25.2 months in 1998 to 25.9 months in 2003, while the median duration for exclusive breastfeeding has increased from 3.5 months to 5.9 months over the same period of time. Interestingly, 94 percent of children aged 0-3 months and 85 percent of children aged 0-6 months were exclusively breastfed, suggesting an excellent compliance with the WHO recommendations.

CHAPTER X

KNOWLEDGE AND ATTITUDES CONCERNING STIs AND HIV/AIDS

Altankhuu Mordorj and Munkhtsetseg Pooloi

The first national programme designed to combat the Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) was launched in 1992. HIV/AIDS and STIs (Sexually Transmitted Infections) are important health concerns. The Government of Mongolia has made great efforts in developing programmes for preventing transmission of these diseases. The Population and Reproductive Health Survey were first conducted in 1998. The survey of 2003 is the second survey dealing with this topic. While the 1998 survey collected and processed information only on knowledge concerning HIV/AIDS, the 2003 survey included questions about HIV/AIDS and added new questions pertaining to STIs. This chapter is composed of two parts: STIs and HIV/AIDS. It covers information including knowledge of prevention methods and where information and services related with STIs, HIV/AIDS are obtained.

Knowledge and Attitudes Concerning STIs

Table 10.01 categorizes the percentage of women by knowledge of STIs, by source of information, marital status, residence, region and educational level. As shown in Table 10.01, 95 percent of all women have heard about STIs and most of them have obtained the information from mass media, such as TV (68 percent), newspaper (58 percent) and radio (41 percent). Among those who have heard about STIs, the highest percentage (97 percent) of women were discovered in groups representing women aged 30 and older. The lowest percentage (89 percent) of women who had obtained information about STIs were women represented in age group 15-19 years old. In addition to hearing about STIs from TV, radio and newspaper, more adolescents (women aged 15-19 years) obtained information about STIs from teachers (28 percent), friends and relatives (20 percent). Only 20 percent of the women surveyed obtained such information from health workers. This percentage was less for women in other age groups (29-37 percent).

As opposed to over 97 percent of currently married and ever-married women who have heard of STIs, only 90 percent of never married women have heard of STIs. Moreover, never married women were more likely to obtain information from teachers, friends and relatives. Urban women obtained information more frequently from TV, newspaper and colleagues as opposed to rural women who acquired information from radio and health workers. The mean number of sources of information was highest for Ulaanbaatar women (2.8 sources), and lowest for women living in the Western region (2.2 sources). While 99 percent of women in Ulaanbaatar expressed knowledge about STIs, 86 percent of women living in the Western region knew about STIs and fewer of them obtained information from TV, newspaper and pamphlets compared to other women in other regions and in Ulaanbaatar. The proportion of women with knowledge about STIs increased with higher educational levels. 79 percent of women with a primary educational level expressed knowledge about STIs.

Table 10.01 Percentage of Women by Knowledge of STIs and by Source of Knowledge, Mean Number of Sources Sited, According to Background Characteristics, Mongolia, 2003

Background Characteristics	Knows STIs	Sources of STIs Information											Number of Women	Mean
		Radio	TV	Newspapers	Pamphlets	Health worker	Mosque, Church	School	Community Meetings	Friends, Relatives	Work Place	Other Sources		
Age group														
15-19	88.6	22.0	60.4	45.8	12.5	20.3	0.6	27.6	3.1	20.1	0.0	0.1	1 347	2.4
20-24	94.4	41.8	64.3	54.9	14.8	28.9	0.6	3.1	1.6	21.6	0.9	0.2	1 420	2.5
25-29	95.8	45.2	68.3	62.8	15.6	33.6	0.1	2.3	1.3	17.0	2.5	0.0	1 509	2.6
30-39	97.2	43.6	70.7	60.3	14.4	37.1	0.3	2.4	2.9	13.1	3.0	0.0	2 948	2.6
40-49	96.5	46.4	72.5	62.2	14.0	33.7	0.2	2.6	4.0	12.8	4.3	0.0	2 090	2.6
Current Marital Status														
Currently Married	96.7	44.9	69.2	60.9	14.3	35.2	0.2	2.4	2.7	14.0	2.8	0.0	6 345	2.5
Formerly Married	96.9	43.9	74.5	60.9	16.2	34.8	0.3	2.6	3.2	15.5	3.4	0.0	686	2.6
Never Married	90.2	29.6	63.8	50.8	13.8	22.7	0.7	17.7	2.6	21.6	1.1	0.2	2 283	2.5
Residence														
Urban	98.0	37.7	83.5	65.5	17.8	28.8	0.3	7.7	2.7	19.2	3.3	0.1	4 973	2.7
Rural	91.8	45.1	50.8	49.9	10.3	35.9	0.4	4.4	2.8	12.3	1.5	0.0	4 341	2.3
Region														
Central	96.2	38.0	66.9	56.6	12.4	35.4	0.3	5.2	2.6	17.2	2.1	0.0	2 983	2.5
East	95.9	45.8	58.9	53.7	16.2	40.5	0.4	5.9	2.9	15.6	3.5	0.0	827	2.5
West	86.4	41.4	49.0	46.2	8.3	31.9	0.4	4.2	2.9	8.6	0.6	0.1	1 873	2.2
South	96.5	48.0	52.3	51.0	10.5	36.7	0.2	5.8	3.9	10.2	1.5	0.0	608	2.3
Ulaanbaatar	99.0	41.3	87.3	70.0	20.2	25.8	0.3	8.5	2.4	20.7	3.7	0.1	3 023	2.8
Highest Educational Level														
Primary or Less	78.8	34.1	35.2	25.4	4.9	24.7	0.4	8.6	1.2	15.1	0.3	0.1	1 132	1.9
Incomplete Secondary	93.9	40.5	58.4	47.0	10.0	30.8	0.5	9.2	2.4	14.5	0.8	0.1	2 280	2.3
Complete Secondary	98.1	42.4	75.8	63.8	15.1	30.7	0.4	4.7	1.9	17.8	1.3	0.1	2 570	2.6
More than Secondary	99.2	42.9	80.4	72.8	19.9	36.6	0.2	4.5	4.0	15.9	5.1	0.0	3 332	2.8
Total	**95.1**	**41.1**	**68.3**	**58.2**	**14.3**	**32.1**	**0.3**	**6.2**	**2.7**	**16.0**	**2.4**	**0.1**	**9 314**	**2.5**

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

Whereas, 99 percent of women with a more than secondary educational level expressed knowledge about STIs. Women with an incomplete secondary education made up the highest percentage of women who obtained information from teachers. This percentage may reflect the fact that health classes, containing information about HIV/AIDS, were included in the secondary school curriculum beginning in 1998/1999. Women with primary educational level obtained information about STIs from the lowest mean number of sources (1.9), while women with a secondary educational level and higher obtained information from the highest mean number of sources (2.8). Over 93 percent of women replied that STIs were transmitted through sexual intercourse, 4 percent replied that STIs were transmitted through non-sexual contact, 1.3 and 0.2 percent of women replied that STIs were contractable through needles, syringes and medical equipment, and through kissing (Table 10.01A). Another 2 percent of women mentioned other means of STIs contraction. Those who referred to non-sexual physical contacts as the means of infection by STIs made up 5 percent of women aged 15-19 years, 5 percent of women aged 20-24 years, 5 percent of rural women, 9 percent of women living in the Eastern region and 10 percent of women with a primary educational level. The proportion of women who knew about the means of infection or transmission of STIs increased with increased age and educational level.

Table 10.01A. Percent Distribution of Women Who Know of STIs by Knowledge of Ways to get STIs, According to Background Characteristics, Mongolia 2003

Background Characteristics	Ways to get STIs					Number of Women
	Sexual intercourse	Syringe and medical tools	When kissed with someone	Domestic / household items	Other	
Age group						
15-19	87.1	3.4	0.2	4.6	4.7	1 193
20-24	92.1	1.6	0.3	4.8	1.2	1 340
25-29	94.9	1.0	0.2	2.6	1.3	1 446
30-39	94.5	1.0	0.1	3.6	0.8	2 864
40-49	94.4	0.5	0.0	3.7	1.4	2 016
Current Marital Status						
Currently Married	94.3	0.9	0.1	3.5	1.2	6 134
Formerly Married	94.6	1.1	0.0	3.2	1.1	665
Never Married	89.5	2.6	0.2	4.7	3.0	2 060
Residence						
Urban	94.8	1.3	0.0	2.7	1.2	4 873
Rural	91.1	1.4	0.3	5.0	2.2	3 986
Region						
Central	94.9	1.2	0.1	2.9	0.9	2 869
East	86.4	1.8	0.3	9.2	2.3	793
West	88.2	1.9	0.4	5.4	4.1	1 618
South	94.9	1.2	0.3	2.6	1.0	587
Ulaanbaatar	95.7	1.0	0.0	2.5	0.8	2 992
Highest Educational Level						
Primary or Less	80.6	2.4	0.4	10.4	6.2	892
Incomplete Secondary	90.2	1.9	0.4	4.7	2.8	2 140
Complete Secondary	95.5	1.2	0.0	2.7	0.6	2 521
More than Secondary	96.7	0.7	0.0	2.2	0.4	3 306
Total	**93.2**	**1.3**	**0.2**	**3.8**	**1.5**	**8 859**

Table 10.02 Percentage of Women Who Know of STIs by Knowledge of symptoms of STIs, According to Background Characteristics, Mongolia, 2003

Background Characteristics	DK symptoms	Symptom of STIs														Total
		Abdominal Pain	Genital discharge	Burning pain on urination	Redness in genital area	Irritating in genital area	Swelling in genital area	Genital sores	Genital warts	Blood in urine	Loss of weight	Skin infection	Infertility	Impotence	Other	
Age group																
15-19	61.1	7.3	27.0	12.1	10.3	21.1	3.9	5.7	11.3	1.8	1.0	1.3	0.6	0.5	0.5	1 193
20-24	47.4	10.5	41.0	17.5	16.3	31.3	6.2	7.2	13.0	2.3	1.4	2.8	1.2	0.9	0.7	1 340
25-29	36.5	12.0	49.9	21.7	23.0	37.3	9.1	9.8	17.1	3.3	2.7	3.3	1.8	1.9	0.9	1 446
30-39	32.8	13.1	52.1	22.0	23.1	41.0	10.1	10.2	18.1	3.5	2.8	3.4	1.6	2.2	1.6	2 864
40-49	34.8	13.2	50.7	21.6	24.6	40.8	10.3	9.9	16.3	3.8	3.0	3.1	1.8	2.3	1.5	2 016
Current Marital Status																
Currently Married	36.2	13.1	49.1	20.9	22.7	38.5	9.5	9.4	17.1	3.4	2.7	3.2	1.6	2.0	1.4	6 134
Formerly Married	31.7	11.0	55.8	23.6	25.7	44.8	11.6	11.7	17.0	4.1	3.3	3.8	2.4	2.9	1.2	665
Never Married	53.6	8.2	35.1	15.5	13.0	26.6	4.8	7.0	11.8	2.1	1.1	1.8	0.8	0.7	0.6	2 060
Residence																
Urban	33.9	11.2	53.0	23.8	23.0	41.8	9.5	10.6	17.0	3.9	2.3	3.3	1.9	2.2	1.0	4 873
Rural	47.2	12.4	38.2	15.0	17.8	29.4	7.4	7.1	14.5	2.2	2.5	2.5	1.0	1.2	1.4	3 986
Region																
Central	39.3	12.2	45.8	18.4	18.5	33.1	8.2	9.0	19.1	2.5	2.6	3.3	0.8	1.4	1.4	2 869
East	32.5	20.3	51.8	20.7	27.6	44.6	12.2	7.9	14.6	4.2	2.8	3.8	3.2	2.8	1.5	793
West	57.1	7.7	31.6	9.9	16.1	27.9	4.4	5.3	11.9	1.7	1.4	0.7	0.6	0.8	0.6	1 618
South	45.5	13.1	37.1	16.5	13.5	22.1	5.1	7.2	8.7	1.9	2.2	1.4	0.3	0.5	1.5	587
Ulaanbaatar	32.0	11.0	55.2	27.0	24.7	44.2	10.8	11.7	16.6	4.4	2.6	3.9	2.4	2.6	1.1	2 992
Highest Educational Level																
Primary or Less	68.2	7.4	19.3	7.3	7.3	14.2	3.3	2.4	6.5	1.1	1.5	1.2	0.4	0.1	0.8	892
Incomplete Secondary	54.8	10.4	31.8	12.6	14.5	24.0	5.2	4.9	9.7	1.4	1.1	1.5	0.3	0.4	1.2	2 140
Complete Secondary	37.9	9.4	48.1	19.9	18.9	36.9	7.9	8.6	15.6	2.2	1.8	2.7	1.2	0.8	1.0	2 521
More than Secondary	24.1	15.7	61.8	27.9	29.6	49.5	12.6	13.8	22.5	5.4	3.9	4.6	2.7	3.8	1.5	3 306
Total	**39.9**	**11.8**	**46.4**	**19.8**	**20.7**	**36.2**	**8.6**	**9.0**	**15.8**	**3.1**	**2.4**	**3.0**	**1.5**	**1.7**	**1.2**	**8 859**

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

Table 10.02 shows the percentage of women who knew about the symptoms of STIs by specific symptoms of STIs, according to the background characteristics such as age, marital status, residence, region, and educational level. According to Table 10.02, 40 percent of women in and 61 percent of girls aged 15-19 years replied that they did not know about the symptoms of STIs. The knowledge of women aged 15-39 years, who knew about the symptoms of STIs, tended to improve with increased age. 46 percent of never married women knew about the symptoms of STIs and around 64-68 percent of married and previously married women expressed knowledge about the symptoms of STIs. This percentage indicates that married and previously married women expressed more comprehensive knowledge pertaining to STIs when compared to women who have never been married. The knowledge of married women was more comprehensive than that of unmarried women for each type of symptom. Knowledge of urban women (66 percent) was more comprehensive than the knowledge of STIs symptoms expressed by rural women (53 percent). In terms of regional differences, the percentage of women who knew about the symptoms of STIs was highest (68 percent) for women in Ulaanbaatar, followed by the Eastern region (67 percent), the Central region (61 percent), the Southern region (54 percent), and the Western region (43 percent). Knowledge of women in the Western region appeared to be less than that of women living in other regions and Ulaanbaatar, for most of STIs symptoms.

Prevention

Table 10.03 presents the percentage of women who replied that STIs were preventable. The table categorizes the groups by specific preventive ways, age group, marital status, residence, region, and educational level. Nearly all women (95 percent) stated that STIs were preventable as opposed to 3 percent who stated that these deseases were not preventable. About 2 percent of all women replied they did not know. The percentage of women, who stated that STIs were preventable, increased with the women's ages and educational levels. Nearly three quarters (73 percent) of those who replied that STIs were preventable, advocated condom use to avoid STIs, and 56 percent suggested that having only one sexual partner was also preventive measure. Abstaining from sex as a preventive way to avoid STIs was reported by a higher proportion of women in age group 15-19 (18 percent), in the never married group (17 percent), in rural areas (15 percent), and in the Eastern region (19 percent).

Use of condoms as a means of prevention was mentioned most frequently by women aged 20-24 years compared to women in other age groups. About 67-77 percent of women aged 25 years and older recommended condom use, while over 60 percent of women suggested having only one partner as a means to avoid STIs infection.

Those who replied that using condoms and having one sexual partner, as STIs prevention methods, accounted for 72 and 65 percent of currently married women, while a higher proportion of formerly married women (77 percent) stated that use of condoms was the main preventive method. Formerly married women suggested more often that avoiding sex with prostitutes (13 percent), using only disposable syringes (6 percent), and abstaining from blood transfusions (5 percent) when compared to currently married and never married women.

Table 10.03 Percentage of Women Who Know of STIs by Knowledge of Ways to Avoid STIs, According to Background Characteristics, Mongolia, 2003

Background Characteristics	Know to Avoid STIs			Ways to Avoid STIs								Number of Women
	Yes	No	DK	Abstain from sex	Use condoms	Have one partner	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid Blood transfusions	Use only disposable injection syringe	Misinformation*	
Age group												
15-19	90.8	4.4	4.8	18.0	72.0	25.3	6.3	1.0	2.6	5.1	3.6	1 193
20-24	92.3	4.8	2.9	11.9	77.2	47.7	8.4	0.4	2.6	3.6	2.5	1 340
25-29	95.5	2.7	1.8	12.1	76.8	62.0	9.9	1.3	2.6	3.7	1.9	1 446
30-39	96.5	1.9	1.6	12.5	73.2	64.5	10.6	1.0	2.9	4.1	2.7	2 864
40-49	95.8	2.4	1.8	15.9	67.2	64.3	11.7	1.0	3.8	4.7	2.6	2 016
Current Marital Status												
Currently Married	95.5	2.6	1.9	12.7	71.5	65.3	10.3	1.0	3.0	4.0	2.4	6 134
Formerly Married	96.4	2.3	1.4	14.4	76.7	50.2	12.9	1.7	4.8	6.2	3.1	665
Never Married	92.1	4.0	3.9	17.1	75.7	31.4	7.4	0.8	2.3	4.1	3.2	2 060
Residence												
Urban	96.9	1.6	1.6	12.7	78.4	58.8	12.2	1.4	3.8	5.0	2.3	4 873
Rural	92.3	4.5	3.2	15.3	66.1	53.2	6.9	0.5	2.0	3.3	3.2	3 986
Region												
Central	95.9	2.4	1.7	16.8	69.6	57.0	10.3	0.2	1.9	2.9	2.8	2 869
East	94.6	3.8	1.6	19.3	71.2	55.4	5.3	0.8	3.9	4.0	3.6	793
West	89.4	5.7	4.9	10.2	64.1	55.7	5.4	0.2	1.2	4.3	4.2	1 618
South	94.2	3.4	2.4	6.5	74.6	37.8	7.5	2.4	0.2	0.9	1.7	587
Ulaanbaatar	96.9	1.5	1.6	13.1	80.8	59.7	13.4	1.9	5.3	6.2	1.7	2 992
Highest Educational Level												
Primary or Less	83.5	9.0	7.5	14.2	51.1	34.0	4.6	0.3	1.0	3.3	6.0	892
Incomplete Secondary	91.9	4.4	3.6	14.0	67.1	45.9	6.9	0.2	1.7	3.1	3.1	2 140
Complete Secondary	97.2	1.5	1.2	13.3	79.7	57.1	9.1	1.0	2.1	3.2	2.0	2 521
More than Secondary	97.9	1.3	0.8	14.1	77.3	68.3	13.7	1.6	5.0	6.0	1.9	3 306
Total	**94.8**	**2.9**	**2.3**	**13.9**	**72.9**	**56.2**	**9.8**	**1.0**	**3.0**	**4.2**	**2.6**	**8 859**

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

The percentage of women who responded that STIs were preventable was higher for urban women (97 percent) by 5 points than for rural women (92 percent). Rural women referred to the use of condoms as a means of STIs protection less frequently than urban women (66 percent versus 78 percent).

Among regions, 81 percent of women in Ulaanbaatar mentioned the use of condoms as the primary method of protection from STIs. The lowest percentage (64 percent) of women living in the Western region also stated that condom use was the primary method for the prevention of STIs. The percentage of women who mentioned having only one sex partner, as the most effective means for STIs prevention, was lowest (38 percent) among women in the Southern region, and highest (60 percent) in Ulaanbaatar, a difference of 22 points.

The women who stated that STIs were not preventable accounted for 9 percent of women with primary education and 1 percent of women with more than secondary education. The higher the educational level of the women, the greater the percentage of women, who named at least one method for preventing STIs, (excluding abstaining from sex). Thus, the STIs prevention knowledge expressed by less educated women was inadequate.

Table 10.03A. Among Women Who Know of STIs, the Percent Distribution of Women Who Know from Whom to Seek Assistance When a Person is Infected with STIs, According to Background Characteristics, Mongolia 2003

Background Characteristics	Don't know	Seeking assistance from						Number of Women
		Doctor/ Health worker	Husband/ partner	Parents	Friends	Sexual partner	Other	
Age group								
15-19	0.1	91.8	0.3	6.8	0.6	0.3	0.1	1 193
20-24	0.1	97.3	0.7	1.1	0.4	0.3	0.1	1 340
25-29	0.1	98.4	0.8	0.3	0.0	0.3	0.1	1 446
30-39	0.0	98.9	0.8	0.1	0.0	0.2	0.0	2 864
40-49	0.1	99.0	0.8	0.0	0.0	0.1	0.0	2 016
Current Marital Status								
Currently Married	0.1	98.7	0.9	0.1	0.0	0.2	0.0	6 134
Formerly Married	0.0	99.6	0.0	0.2	0.0	0.2	0.0	665
Never Married	0.1	93.9	0.1	4.8	0.6	0.4	0.1	2 060
Residence								
Urban	0.1	97.6	0.6	1.4	0.1	0.2	0.0	4 873
Rural	0.1	97.7	0.8	0.9	0.2	0.2	0.1	3 986
Region								
Central	0.0	97.9	0.7	1.1	0.1	0.1	0.1	2 869
East	0.0	98.4	0.4	0.8	0.0	0.4	0.0	793
West	0.1	97.5	0.9	1.3	0.1	0.1	0.0	1 618
South	0.0	96.4	0.7	1.9	0.3	0.7	0.0	587
Ulaanbaatar	0.2	97.6	0.6	1.2	0.2	0.2	0.0	2 992
Highest Educational Level								
Primary or Less	0.1	93.8	1.0	3.9	0.3	0.6	0.3	892
Incomplete Secondary	0.1	97.1	0.5	2.0	0.2	0.1	0.0	2 140
Complete Secondary	0.1	97.8	0.8	1.0	0.2	0.2	0.0	2 521
More than Secondary	0.0	98.9	0.7	0.1	0.1	0.2	0.0	3 306
Total	**0.1**	**97.6**	**0.7**	**1.2**	**0.2**	**0.2**	**0.0**	**8 859**

When women were asked what their treatment plan would be if they contracted a STIs, 98 percent of women stated that they would go to a doctor or health worker, 1.2 percent stated that they would seek assistance from parents, 0.7 percent stated that they would seek assistance from their husbands or partners, and 0.1 percent states that they would not know where to go for help (Table 10.03A). The percentage of women who stated that they would go to a doctor or health worker increased with the increasing age and educational level of the women. Among very small portion of women, about 1 percent aged 25-29 years, stated that they would consult with their husband or partner, which makes up the highest percentage when compared to other age groups. While one percent of married and one percent of rural women would consult with their husbands or partners, 5 percent of never married women, 7 percent of women aged 15-19 years, and 4 percent of women with primary educational level replied they would consult their parents.

Knowledge about HIV/AIDS

This section presents the findings regarding knowledge, source of knowledge about HIV/AIDS (Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome) and the behavioural changes that result from that knowledge.

Table 10.04 represents women's knowledge and source of knowledge about HIV/AIDS, categorized by age group, marital status, residence, region, and educational level. As shown Table 10.04, 96 percent of women reported that they had heard of HIV/AIDS. The primary sources of HIV/AIDS information reported was through TV (76 percent), followed by newspaper (58 percent), radio (46 percent), and health workers (28 percent). The percentage of women, who reported hearing of HIV/AIDS, increased with age when accounting for most sources of information. Apart from hearing of HIV/AIDS from mass media (TV, radio and newspaper), 22 percent of girls aged 15-19 years reported obtaining information about HIV/AIDS from their teachers. Sexually active women or those aged 15-29 years obtained information from friends and relatives compared to women in other age groups. The percentage of women who reported acquiring information about HIV/AIDS from health workers varied by age, ranging from the lowest (19 percent) among women aged 15-19 years to highest (33 percent) among women aged 30-39 years.

The highest proportion of women who have heard of HIV/AIDS was among urban women (99 percent) and especially, women in Ulaanbaatar (99.7 percent). The lowest percentage of women who have heard of HIV/AIDS represented rural women (92 percent), and in particular, women living in the Western area (88 percent). The higher the educational level, the higher the percentage of women who reported having knowledge about HIV/AIDS. For example, the proportion of women who have heard of HIV/AIDS increased from 78 percent among women with a primary educational level to 99.5 percent among women with a more than secondary educational level. The mean number of source of information was lowest (1.9) among women with a primary educational level and highest (2.9) for women with a more than secondary educational level. Figure 10.01 demonstrates, for comparison, the percentage of women who have heard of HIV/AIDS by source of information during the 1998 and 2003 surveys.

Table 10.04 Percentage of Women by Knowledge of HIV/AIDS and by Source of Knowledge, and Mean Number of Sources Sited, According to Background Characteristics, Mongolia, 2003

Background Characteristics	Knows HIV/AIDS	Sources of HIV/AIDS Information											Number of Women	Mean
		Radio	TV	Newspapers	Pamphlets	Health worker	Mosque, Church	School	Community Meetings	Friends, Relatives	Work place	Other		
Age group														
15-19	90.2	27.6	71.6	47.1	14.0	19.4	0.1	22.3	2.1	14.0	0.1	0.1	1 347	2.4
20-24	94.2	44.9	73.1	55.6	16.1	23.7	0.2	3.0	1.0	13.0	0.8	0.1	1 420	2.5
25-29	96.2	48.8	74.4	61.3	15.7	28.8	0.0	1.8	1.3	11.6	2.1	0.0	1 509	2.6
30-39	97.2	50.3	77.8	61.0	16.3	32.5	0.2	1.8	2.4	7.9	2.8	0.0	2 948	2.6
40-49	97.3	52.0	78.8	60.8	16.7	28.5	0.1	1.8	3.6	7.6	4.2	0.0	2 090	2.6
Current Marital Status														
Currently Married	96.8	50.4	76.2	59.8	16.1	30.1	0.1	1.7	2.4	8.5	2.6	0.0	6 345	2.6
Formerly Married	97.5	46.9	79.4	62.8	18.8	29.2	0.3	2.3	2.8	10.1	3.6	0.0	686	2.6
Never Married	91.5	34.9	73.7	52.2	14.6	20.7	0.2	14.7	1.8	14.5	1.1	0.1	2 283	2.5
Residence														
Urban	98.6	43.4	91.0	66.3	19.8	26.0	0.1	6.2	2.3	11.9	3.1	0.0	4 973	2.7
Rural	92.1	49.7	58.5	48.9	11.5	29.8	0.1	3.5	2.2	8.0	1.5	0.0	4 341	2.3
Region														
Central	96.4	42.0	74.8	55.1	12.7	29.5	0.2	4.6	2.2	10.4	2.1	0.0	2 983	2.4
East	95.3	49.1	64.4	55.3	21.8	35.4	0.1	4.5	2.8	10.0	4.7	0.1	827	2.6
West	87.7	47.9	56.4	46.0	8.1	27.0	0.1	3.1	2.2	5.4	0.3	0.0	1 873	2.2
South	95.7	52.5	64.8	45.7	11.7	28.9	0.0	3.8	3.6	7.2	1.2	0.0	608	2.3
Ulaanbaatar	99.7	47.6	94.2	72.0	23.2	24.2	0.1	6.8	1.9	13.3	3.3	0.0	3 023	2.9
Highest Educational Level														
Primary or Less	78.2	38.3	39.9	25.4	6.4	19.8	0.0	6.2	0.9	9.1	0.3	0.0	1 132	1.9
Incomplete Secondary	95.1	44.7	66.0	46.3	10.7	26.5	0.1	7.7	1.2	10.1	0.7	0.0	2 280	2.3
Complete Secondary	98.6	47.3	83.6	64.9	17.1	26.4	0.2	4.0	1.9	11.2	1.4	0.0	2 570	2.6
More than Secondary	99.5	49.5	88.7	72.2	21.8	32.4	0.2	3.3	3.7	9.6	4.8	0.0	3 332	2.9
Total	**95.6**	**46.3**	**75.8**	**58.1**	**15.9**	**27.8**	**0.1**	**4.9**	**2.3**	**10.1**	**2.3**	**0.0**	**9 314**	**2.6**
						RHS Survey 1998								
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: Percentage sum to more than 100% because of multiple responses.

The percentage of women who received information about HIV/AIDs was about the same for both the RHS 1998 and the RHS 2003 (96 percent each).

In general, proactive information by health workers is likely to increase and, on the contrary, information distributed by the mass media may decrease. For example, the percentage of HIV/AIDS information provided by radio has decreased from 74 percent in 1998 to 46 percent in 2003, dropping by 28 points. The proportion of HIV/AIDS information provided by health workers increased from 18 percent in 1998 to 28 percent in 2003 by 10 points.

The mean number of sources of HIV/AIDS information was 3.0 in 1998 and 2.6 in 2003. The mean number of sources of HIV/AIDS information decreased within most subgroups, such as age group, marital status, residence, region and educational level. Figure 10.02 displays the mean number of sources of HIV/AIDS information by age group for years 1998 and 2003.

Figure 10.01 Percentage of Women Who Receive Information about HIV/AIDS, by source of Information, 1998, 2003

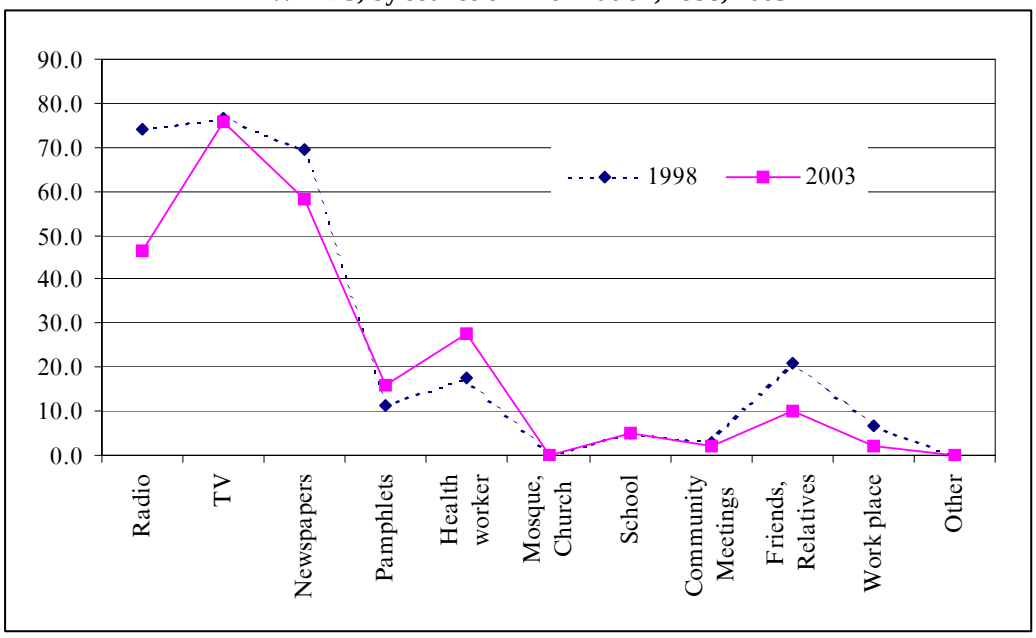
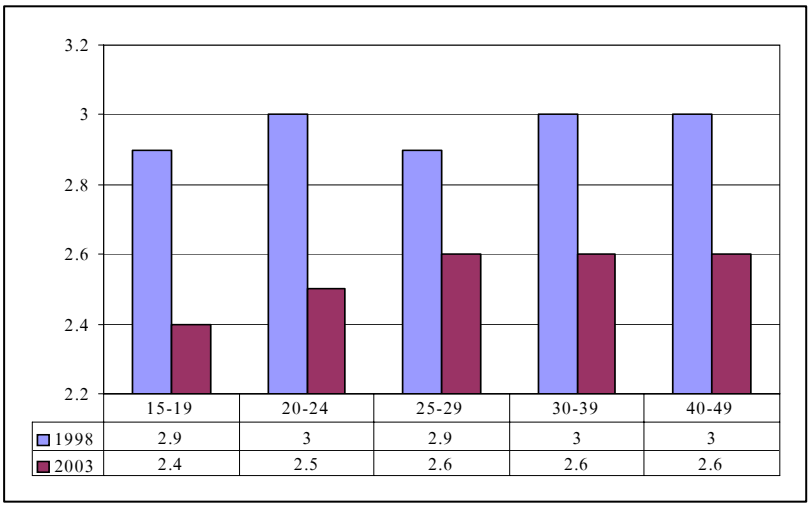


Figure 10.02 Mean Number of Sources of HIV/AIDS Information, by age group, 1998, 2003



Prevention

Table 10.05 shows the percentage of women who knew about methods of protection from HIV/AIDS, and those who were misinformed, by age, marital status, residence, region, and educational level. The answer that HIV/AIDS was not preventable was provided by 4 percent of women. Of those who replied that prevention was feasible, 69 percent named condom use, 55 percent named one sex partner and 26 percent named use of disposable syringe, as the primary means of preventing HIV/AIDS infection.

In terms of variations by age, 18 percent of adolescent women aged 15-19 years stated that abstaining from sex was the most effective method for preventing the spread of HIV/AIDS. The percentage of adolescents aged 15-19 years who stated that having only one sex partner was most effective to prevent HIV/AIDS infection was 2.5 times less than that of women aged 25-49 years (24 percent versus 62 percent). Although adolescents aged 15-19 years stated that the use of disposable syringes and avoiding blood transfusions were the most effective methods to prevent HIV/AIDS infection, (more so than women in other age categories) they were also more misinformed in comparison to women in other age groups (2 percent).

Among currently married women, 69 percent suggested the use of condoms as the primary method for avoiding the transmission HIV/AIDS, 64 percent of women stated having only one sex partner was the most effective prevention method. Formerly married women mentioned the use of condoms most frequently (71 percent), while 17 percent of never married women stated that abstinence from sex was the most effective method to prevent the spread of HIV/AIDS.

The percentage of women who replied that HIV/AIDS was not preventable was 4 points lower among urban women (2 percent) when compared to rural women (6 percent). By contrast, HIV/AIDS prevention knowledge reported by urban women was higher than their rural counterparts when accounting for most HIV/AIDS prevention methods. The percentage of rural women (16 percent) choosing abstinence from sex was 3 points higher than urban women (13 percent). The percentage of rural women (3 percent) who reported misinformation about HIV/AIDS prevention was about 2 points higher than that of urban women (1 percent).

Compared with other regions, women in Ulaanbaatar represented the highest percentage of those who reported that condom use was the most effective method for preventing HIV/AIDS infection (80 percent). 57 percent of women in Ulaanbaatar reported that having only one sex partner would best prevent HIV/AIDS transmission, 34 percent reported using disposable syringes as the most effective prevention method, and 20 percent reported that avoiding blood transfusions was the most effective methods to prevent HIV/AIDS infection. Women in the Central region constituted the highest percentage of women who had acquired misinformation about HIV/AIDS prevention (3 percent), while women in the Southern region and Ulaanbaatar were least likely to be misinformed (1 percent each).

HIV/AIDS knowledge, among women with a primary school education, was still lower when compared with the knowledge level of women who had acquired a

Table 10.05 Percentage of Women Who Know of HIV/AIDS by Knowledge of Ways to Avoid HIV/AIDS, and With Misinformation, According to Background Characteristics, Mongolia, 2003

Background Characteristics	No Way to Avoid	Ways to Avoid HIV/AIDS								Number of Women
		Abstain from sex	Use condoms	Have one sexual partner	Avoid sex with prostitutes	Avoid sex with homosexuals	Avoid Blood Transfusion	Use only disposable injection syringe	Misinformation*	
Age group										
15-19	5.4	17.7	66.7	24.4	6.4	1.3	13.7	29.4	2.1	1 215
20-24	0.7	12.7	72.3	47.7	8.6	0.8	11.6	26.3	1.5	1 337
25-29	4.0	12.1	73.3	61.4	10.4	1.2	13.0	25.8	1.7	1 451
30-39	3.5	13.5	70.1	62.8	11.0	1.6	12.8	25.4	2.0	2 866
40-49	3.2	16.1	64.7	61.2	11.2	1.6	13.3	24.7	1.9	2 033
Current Marital Status										
Currently Married	3.7	13.1	68.7	63.6	10.3	1.4	12.3	26.4	1.8	6 145
Formerly Married	3.6	17.0	71.4	48.4	12.9	2.1	16.1	28.1	2.1	669
Never Married	5.5	17.1	70.2	30.7	8.0	1.1	13.6	29.4	2.0	2 088
Residence										
Urban	2.4	13.1	75.8	57.1	12.6	1.9	16.6	31.1	1.2	4 904
Rural	6.3	15.8	61.2	51.8	6.7	0.8	8.4	19.7	2.6	3 998
Region										
Central	3.5	17.4	64.0	56.7	10.4	0.5	10.4	26.3	2.6	2 875
East	5.8	19.2	67.8	48.2	6.6	0.9	14.0	24.1	2.3	788
West	7.7	11.1	59.9	54.5	5.6	0.4	6.9	15.5	1.6	1 643
South	6.2	7.6	66.8	40.7	7.2	2.6	4.6	16.3	1.2	582
Ulaanbaatar	1.9	13.2	80.2	57.4	13.3	2.7	19.8	33.8	1.3	3 014
Highest Educational Level										
Primary or Less	10.3	13.4	46.1	32.1	5.1	0.5	5.8	13.7	3.5	885
Incomplete Secondary	6.2	14.8	61.9	42.7	6.8	0.6	7.6	18.2	2.3	2 168
Complete Secondary	3.1	12.5	76.7	55.9	9.4	1.1	12.5	26.7	1.4	2 534
More than Secondary	1.9	15.6	74.5	67.8	13.8	2.4	18.6	33.8	1.5	3 315
Total	**4.1**	**14.3**	**69.2**	**54.7**	**10.0**	**1.4**	**12.9**	**26.0**	**1.9**	**8 902**
				RHS Survey 1998						
Total	**5.7**	**7.7**	**41.1**	**62.0**	**4.3**	**2.6**	**13.0**	**12.0**	**4.6**	**7,164**

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

secondary educational level and higher. For example, 75-77 percent of women with secondary educational level and higher reported that condom use was the most effective method to prevent HIV/AIDS infection compared to only 46 percent of women with only a primary school education who reported the same.

No surprisingly, 4 percent of women with a primary educational level reported misinformation as opposed to only 1-2 percent of women who had acquired a secondary educational level or higher. Survey findings show that the quality of HIV/AIDS information may have improved. For example, the number of wrong answers to the question regarding HIV/AIDS prevention methods decreased two times (from 5 percent in 1998 to 2 percent in 2003), and the proportion of women who recommended condom use increased from 41 percent in 1998 to 69 percent in 2003, an increase of 28 points.

Perceived Risks of HIV/AIDS

Table 10.06 shows the percent distribution of women who knew about HIV/AIDS by perceived risks of HIV/AIDS such as, “Can a healthy person have HIV/AIDS?”, “Is AIDS a fatal desease?”, and “What is your chance of being infected with the HIV?” They were also asked if they knew how to treat people infected with HIV. The respondents were compared by age group, marital status, residence, region and educational level. The correct answer to the question whether a healthy looking person can transmit HIV/AIDS was “Yes”. As seen from the table, 66 percent of women replied “Yes”, 26 percent “No” and the remaining 8 percent replied “Don’t know”.

A higher percentage of urban women (72 percent) reported that a healthy looking person can transmit the HIV infection. The percentage of correctly-answered information increased with the educational level of women. For example, the proportion of these women who answered “Yes” increased from 50 percent among women with a primary educational level to 74 percent among women with a more than secondary educational level. In comparison with the RHS 1998, the percentage who answered “Yes,” and among the women who demonstrated a correct understanding, increased by 12 points from 54 percent in 1998 to 66 percent in 2003. The proportion of women who demonstrated misinformation, or who answered with “No,” and of those who did not know, decreased by 7 points and 6 points, respectively.

Regarding the question “Do people die if they are infected with the HIV?”, 57 percent of women replied that a person with HIV would always die, 40 percent replied some HIV positive people would die, while 2 percent said that HIV positive individuals would not die. About 2 percent of women stated they did not know the answer (Table 10.06).

Interestingly, 76 percent of the women replied that they have “No risk at all” when answering the question whether or not she perceived herself at risk for contracting HIV/AIDS.This figure, regarding personal risk for contracting HIV/AIDS, remained almost the same as reported in 1998 (76 percent versus 75 percent).

Table 10.06 Percent Distribution of Women Who Know of HIV/AIDS by Perceived Risks of HIV/AIDS, and Percent Distribution of Women Who Know How to Treat persons infected with HIV/AIDS, According to Background Characteristics, Mongolia, 2003

Background Characteristics	Can a Healthy Person Have HIV/AIDS			Is HIV/AIDS a Fatal Disease				How to treat persons with HIV/AIDS					Respondent's Chance of Getting HIV/AIDS					Number of Women
	No	Yes	DK	Almost Never	Some-times	Almost Always	DK/ Missing	The same as before	Try not to be infected by HIV/ AIDS	Try to under-stand and help	Isolate from commu-nity	DK	No Risk at All	Small	Mode-rate	Great	DK/ Missing	
Age group																		
15-19	26.4	62.9	10.7	2.1	44.7	50.9	2.2	40.2	31.0	13.6	10.9	4.3	74.5	19.4	3.6	0.3	2.1	1 215
20-24	26.7	63.6	9.6	2.3	38.7	57.1	1.9	37.2	30.8	11.7	15.6	4.6	74.8	20.9	3.0	0.4	0.9	1 337
25-29	26.3	66.4	7.2	1.6	41.4	55.4	1.6	35.5	31.4	13.9	14.7	4.5	74.0	21.6	3.2	0.3	0.8	1 451
30-39	24.9	66.3	8.7	1.4	38.8	58.7	1.1	33.7	31.9	14.6	16.5	3.2	75.6	19.8	2.9	0.7	1.0	2 866
40-49	24.8	67.8	7.4	1.8	38.4	58.4	1.4	29.6	34.0	17.1	16.5	2.8	78.2	17.5	2.7	0.3	1.3	2 033
Current Marital Status																		
Currently Married	25.6	66.4	8.1	1.7	39.8	57.2	1.3	33.1	32.1	14.9	16.4	3.6	76.6	19.3	2.8	0.5	0.8	6 145
Formerly Married	22.6	69.7	7.8	1.0	36.5	60.4	2.1	33.8	35.6	13.5	15.2	1.9	75.3	19.9	2.8	0.3	1.6	669
Never Married	26.7	62.9	10.4	2.2	41.3	54.5	2.1	38.9	30.7	13.6	12.3	4.5	72.9	20.6	3.8	0.5	2.1	2 088
Residence																		
Urban	20.8	71.9	7.3	1.5	33.7	63.5	1.3	41.9	29.9	15.0	10.5	2.7	74.8	20.6	2.9	0.5	1.2	4 904
Rural	31.5	58.3	10.2	2.1	47.5	48.6	1.7	25.3	34.6	13.8	21.3	4.9	76.7	18.6	3.2	0.4	1.1	3 998
Region																		
Central	29.6	63.6	6.8	2.2	41.9	55.1	0.8	34.9	30.4	16.6	17.0	1.1	79.5	16.6	2.8	0.3	0.7	2 875
East	23.5	68.1	8.4	1.4	44.8	51.8	2.0	23.9	42.1	17.6	8.8	7.6	82.2	14.2	2.8	0.3	0.5	788
West	29.6	55.6	14.8	1.8	53.6	41.8	2.9	20.2	32.7	12.1	25.4	9.6	66.7	26.7	4.0	0.6	2.0	1 643
South	30.2	62.9	6.9	2.7	39.2	57.4	0.7	40.0	27.1	12.4	19.2	1.2	80.1	16.7	2.4	0.2	0.7	582
Ulaanbaatar	19.3	73.4	7.3	1.3	29.5	67.8	1.5	43.6	31.5	13.4	9.2	2.4	74.3	20.8	2.8	0.6	1.5	3 014
Highest Educational Level																		
Primary or Less	34.8	50.3	14.9	3.4	51.5	41.4	3.7	20.3	40.2	8.1	25.2	6.1	76.2	17.3	3.8	0.5	2.3	885
Incomplete Secondary	30.2	58.9	10.9	1.9	47.5	48.6	2.0	27.4	34.9	11.6	20.6	5.5	76.0	18.5	3.6	0.3	1.6	2 168
Complete Secondary	25.4	66.2	8.4	1.5	37.5	59.8	1.2	37.1	31.5	13.9	14.2	3.4	77.5	18.5	2.6	0.4	1.0	2 534
More than Secondary	20.3	74.2	5.5	1.4	33.7	64.0	0.9	40.9	28.4	18.6	10.1	2.1	73.9	22.1	2.7	0.6	0.8	3 315
Total	**25.6**	**65.8**	**8.6**	**1.8**	**39.9**	**56.8**	**1.5**	**34.5**	**32.0**	**14.5**	**15.3**	**3.7**	**75.7**	**19.7**	**3.0**	**0.5**	**1.2**	**8 902**
								RHS Survey 1998										
Total	**32.6**	**53.8**	**13.6**	**1.9**	**35.9**	**58.4**	**3.8**	**-**	**-**	**-**	**-**	**-**	**74.7**	**17.2**	**3.4**	**0.8**	**3.9**	**7 164**

Regarding how to treat persons with HIV/AIDS, 35 percent of women would not treat people with HIV/AIDS any differently than those without HIV/AIDS, 32 percent would try not to get infected, 15 percent would try to understand and help, and 15 percent would opt for separating them from the community. About 4 percent of women stated that they did not know the answer to the question regarding how they would behave towards people with HIV/AIDS.

The older the age of the woman the more tolerant they would be toward someone with HIV/AIDS. Similarly, the percentage of women who would try to understand and help, try not to be infected by HIV/AIDS increased slightly with women aged 25 years and older.

Table 10.06 also reveals that older women, particularly among those aged 40-49 years, reported that they would be more "careful"with people infected by HIV/AIDS. This finding implies that more active advocacy is necessary so that people living with HIV/AIDS are not discriminated against. Urban women were more likely to maintain relations with HIV/AIDS infected individuals as before (42 percent), and try to understand and help (30 percent). Rural women reported that they would try not get infected (35 percent) and advocated for separating HIV/AIDS infected people from the society (21 percent). Among regions, 44 percent of women living in Ulaanbaatar expressed their preference to maintain relations as before, which was higher than the percentage of women who gave the same answer from all other regions (20-40 percent). While 42 percent of women in the Eastern region replied they would try not to get infected, 18 percent of them stated they would try to understand and help. A higher percentage of women (25 percent) in the Western region replied that HIV/AIDS infected people should be separated from the society. This percentage reveals that correct HIV/AIDS information and education efforts need to be intensified in rural areas, especially in the Western and Southern regions. Less educated people are more likely to have misconceptions regarding how to treat people with HIV/AIDS. For example, a high proportion of women (25 percent) with a primary education reported that HIV/AIDS positive people should be separated from the public, while a lower percentage of women (10 percent) with a more than secondary educational level believe that HIV/AIDS infected people should be ostracized.

Change in sexual behavior of women who have knowledge about HIV/AIDS

Table 10.07 presents the percentage of women who knew about HIV/AIDS categorized by changes in sexual behavior in order to avoid HIV/AIDS, by women's age group, marital status, residence, region, and educational level. Nearly 85 percent of women who knew about HIV/AIDS, reported no change in sexual behavior, and 14 percent of women mentioned a desire to maintain their virginity. Although women (aged 25-39 years), who were sexually active, reported hearing about HIV/AIDS, 96-98 percent of them did not change their sexual behavior. Urban women who stated that they changed their sexual behavior were more likely to choose condom use or have one sex partner while rural women relied more on ceasing sexual activity completely. The higher the education level, the higher the percentage of women who changed their sexual behavior after they learned about HIV/AIDS. Most women chose condom use and to limit sexual relations to only one partner. Overall, only less than

Table 10.07 Percentage of Women Who Know of HIV/AIDS by Changes in Behavoir in Order to Avoid HIV/AIDS, According to Background Characteristics, Mongolia, 2003

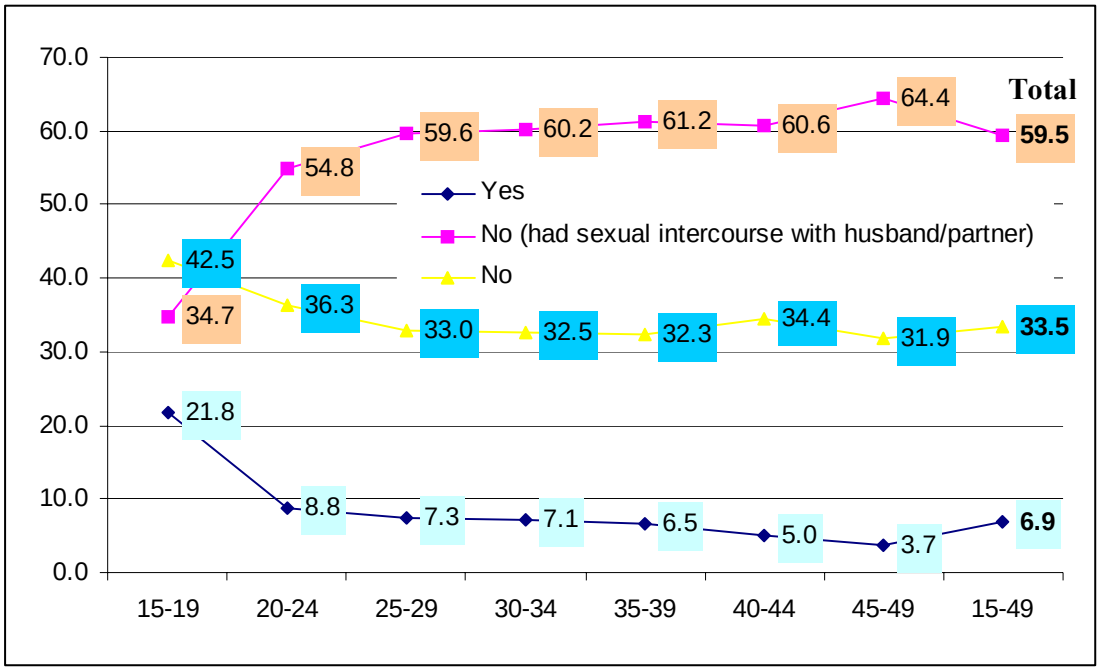
Background Characteristics	Sex Behavoir No Changes	Kept Virginity	Changed Sexual Behavoir					Number of Women
			Stopped Sex	Began Using Condoms	Restrict One Partner	Fewer Partners	Other	
Age group								
15-19	18.6	80.8	0.0	0.3	0.1	0.0	0.0	1 215
20-24	84.2	14.1	0.4	0.8	0.5	0.1	0.0	1 337
25-29	95.7	1.9	0.3	0.9	1.1	0.3	0.2	1 451
30-39	97.9	0.3	0.3	0.6	0.5	0.2	0.1	2 866
40-49	97.5	0.1	1.0	0.5	0.5	0.2	0.1	2 033
Current Marital Status								
Currently Married	98.9	0.1	0.1	0.4	0.4	0.1	0.1	6 145
Formerly Married	93.1	0.0	3.6	1.2	1.5	0.6	0.1	669
Never Married	39.8	57.7	0.6	1.1	0.8	0.3	0.0	2 088
Residence								
Urban	82.1	15.9	0.3	0.8	0.7	0.1	0.1	4 904
Rural	87.6	10.7	0.6	0.4	0.4	0.2	0.1	3 998
Region								
Central	85.4	12.7	0.6	0.6	0.6	0.2	0.0	2 875
East	88.5	10.0	0.6	0.6	0.1	0.3	0.1	788
West	87.9	11.1	0.1	0.3	0.3	0.0	0.1	1 643
South	85.2	12.4	0.9	0.3	0.3	0.5	0.3	582
Ulaanbaatar	80.9	16.9	0.4	0.9	0.9	0.2	0.1	3 014
Highest Educational Level								
Primary or Less	64.9	33.9	0.5	0.3	0.0	0.1	0.0	885
Incomplete Secondary	73.5	25.2	0.4	0.3	0.3	0.3	0.0	2 168
Complete Secondary	86.0	12.3	0.5	0.7	0.5	0.1	0.1	2 534
More than Secondary	96.0	1.5	0.5	0.9	1.0	0.2	0.2	3 315
Total	**84.6**	**13.6**	**0.4**	**0.6**	**0.6**	**0.2**	**0.1**	**8 902**
			RHS Survey 1998					
Total	**81.3**	**15.5**	**0.6**	**1.6**	**0.7**	**0.3**	**0.2**	**7 164**

one percent of women started to use condoms after they heard about HIV/AIDS. This gives an extremely low value to the indicator of behavior change. This situation may be attributed to the women's lack of knowledge regarding methods to protect themselves from HIV/AIDS or may be attributed to the women's economic situation. Further in-depth study is needed for more clarification.

As compared with the previous survey, the percentage of women who had not changed their sexual behavior increased by 1.4 points (from 96.8 percent in 1998 to 98.2 percent in 2003). The percentage of those who changed their sexual behavior decreased by 1.5 points (from 3.4 percent in 1998 to 1.9 percent in 2003). Interesting to note is that the percentage of women who reportedly began using condoms had also decreased by 1 point (from 1.6 percent in 1998 to 0.6 percent in 2003).

As shown in Figure 10.03, seven percent of women used condoms the last time they had sex to protect themselves from STIs and HIV/AIDS, 34 percent did not use condoms at all, and 60 percent did not use condoms because they were married or reported having a regular/same partner. As far as men were concerned, 7 percent of them used condoms last time they had sex, 27 percent reported not using condoms at all, and 67 percent stated that they did not use condoms because they were married or had a regular/same partner. Figure 10.03 also shows the percentage of couples who used condoms during their most recent sexual encounter in order to protect themselves from STIs and HIV/AIDS. The groups are categorized by age.

Figure 10.03 Percentage of Couples Who Used Condom Last Time They Had Sex to Protect from STIs/AIDS



Summary and conclusion

The vast majority of Mongolian women (95 percent) reported that they were aware of STIs. 96 percent of women stated that they had heard about HIV/AIDS and in most cases, they obtained information from TV, radio and newspaper. The mean number of source of information was 2.5 for STIs and 2.6 for HIV/AIDS. 95 percent of all women surveyed believed that STIs were preventable. 96 percent of women confirmed that the HIV/AIDS infection was preventable. The primary methods for preventing STIs and HIV/AIDS were condom use and having only one sex partner. This survey revealed that Mongolian women were familiar with STIs (including HIV/AIDS) protection methods. However, the percentage of behavioral changes needed for the women to protect themselves, i.e. using condoms and having one sexual partner, was extremely low.

The proportion of women who replied that HIV/AIDS was not preventable, (5.7 percent in the previous survey) decreased to 4.1 in 2003, a decline by 1.6 points. Likewise, the percentage of women with misconceptions about HIV/AIDS decreased from 4.6 percent in 1998 to 1.9 percent in 2003. The findings lead to the conclusion that women's knowledge about HIV/AIDS prevention methods improved over the last few years.

However, there were still many women who expressed misconceptions. For example, only slightly more than half of women stated that a healthy looking person was able transmit HIV infection. About 96-98 percent of women (25-39), who were sexually active, reported that they did not change their sexual behaviour after they acquired knowledge about STIs and HIV/AIDS. Less than one percent reported that they started to use condoms.

Changes in behavior depend on various factors, such as attitudes of women towards STIs and HIV/AIDS prevention, sexual behavior, their socio-economic situation, education, communication of these issues, and condom promotion and marketing. Thus further in-depth research is needed to provide reliable information, analysis, and indicators for policy and programme development to address such emerging and important issues.

CHAPTER XI

INDUCED ABORTION

Navchaa Suren and Uranchimeg Davaadorj

One of the challenges in the area of reproductive health in Mongolia is the persistent high level of induced abortion. According to health statistics for 2003, there weree 234 abortions per 1,000 live births, which means approximately one in five live births. Therefore, a set of questions pertaining to abortion was included in this survey. Women respondents were asked specific questions about abortion, the reasons for chosen abortions, who involved in abortion decision making, during what months of pregnancy did the abortion occur and where did the abortion take place, quality and cost of abortion services, any complications encountered, as well as questions linking abortion with contraceptive use. Opinion of women and their husbands regarding legalization of abortion was also asked. The 1998 RHS provided an analysis on abortion based on a few questions concerning unwanted pregnancy and abortion. There were limited possibilities with which to compare the findings of the two surveys, because the previous survey placed more emphasis on unwanted pregnancy and had only a few questions about abortion.

The Health Law of Mongolia amended in 1989 states that "Women have right to decide on maternity themselves," and thus abortion was legalized. The National Reproductive Health Programme (revised in 2001) includes the measures "to investigate the reasons of abortion and infertility, and take measures to reduce them", "specific regulation should be developed and pursued which reflects abortion to be performed in licenced hospitals with sterilized/sanitary conditions using modern methods and anestetics; all abortion cases are to be reported; and post-abortion counselling". The findings of this survey will be useful for implementing these measures.

Out of 9,314 women respondents in the survey, 723 women or 7.8 percent underwent an induced abortion within the five years preceding the survey, 224 women or 2.4 percent experienced miscarriages, and 56 women or 0.6 percent delivered still births. According to this survey, the abortion ratio for this period was 214 abortions per 1000 live births. The abortion ratio according to the health statistics, was 234 per 1000 live births over the same period of time.

Pregnancy Outcomes

Table 11.01 shows the percent distribution of pregnancies terminating within the five years preceding the survey by pregnancy outcome for all women aged 15-49 years. Pregnancy outcomes among women respondents shows that the great majority (78 percent) of pregnancies ended with a live birth, followed by induced abortion (17 percent), still births (4 percent) and miscarriages (1 percent). In Table 11.01, pregnancies were nearly two and a half times as likely to end in abortion among women living in urban areas (24 percent) when compared to women living in rural areas (10 percent). Pregnancy outcomes by regions indicates that the percentage of pregnancies ending in abortion was relatively low in the Western and Southern

regions (7.5 and 8.9 percent respectively), higher in the Southern region (18 percent) and highest in Ulaanbaatar (26 percent). According the findings, generally abortion rate varies among regions, and directly impacts the fertility level.

Pregnancies ending in abortions by women's education level indicates that as education level of women increased, the proportion of pregnancies ending in abortion increased, from 5 percent among women with primary education level to 26 percent among women with more than secondary education level and higher.

Table 11.01 Percent Distribution of Pregnancies Terminating in the Five Years Preceding the Survey by Type of Pregnancy Outcome, According to Background Characteristics, Mongolia 2003

	Pregnancy Outcome					
	Live births	Induced Abortion	Still births	Miscarriage	Total	Number of pregnancies
Current Marital Status						
Currently Married	77.8	16.7	4.6	0.9	100.0	5035
Formerly Married	75.5	17.7	3.6	3.2	100.0	249
Never Married	79.7	15.4	2.9	1.9	100.0	311
Residence						
Urban	70.3	23.7	5.1	0.9	100.0	2675
Rural	84.7	10.2	3.9	1.2	100.0	2920
Regions						
Central	76.1	18.1	4.5	1.4	100.0	1916
East	80.2	13.4	5.1	1.3	100.0	529
West	87.9	7.5	3.6	1.0	100.0	1261
South	83.9	8.9	6.2	1.0	100.0	404
Ulaanbaatar	69.0	25.9	4.5	0.5	100.0	1485
Highest Education Level						
Primary or Less	90.8	4.8	3.2	1.2	100.0	500
Incomplete Secondary	87.5	7.3	4.3	1.0	100.0	1349
Complete Secondary	78.1	16.7	4.4	0.8	100.0	1743
More than Secondary	67.8	26.0	5.0	1.2	100.0	2003
Total	**77.8**	**16.7**	**4.5**	**1.0**	**100.0**	**5595**

Experience with Induced Abortion

Table 11.02 illustrates the number of abortions experienced by all women aged 15-49 years regardless of their exposure to risk of pregnancy. The table also presents the percentage of women who have experienced at least one induced abortion and the precentage distribution of these women by the number of induced abortions, according to selected background characteristics.

Overall, 8 percent of women aged 15-49 years have had at least one abortion within the five years preceding the survey (1998-2003). The proportion who experienced an induced abortion follows an inverted U-shaped pattern by age, rising with age from 6 percent of women aged 20-24 years to 12 percent of women aged 30-39 years, and then declining to 6 percent of women aged 40-49 years. As expected, more urban women (10 percent) when compared to rural women (6 percent) had

abortions. Regional differentials were moderate with the percentage being lowest in the Western region (4 percent) and highest in the Central Region and Ulaanbaatar (both 9 percent).

Table 11.02 Percentage of Women Who Have Had at least One Induced Abortion and, Among these Women, Persent Distribution by the Number of Induced Abortions, According Background Characteristics, Mongolia 2003

	% of women	Number of induced abortions				Number of	
	who had abortion	1	2	3 +	Total	women who had abortion	Number of women
Age group							
15-19	0.3	100.0	0.0	0.0	100.0	4	1347
20-24	5.6	91.1	8.9	0.0	100.0	79	1420
25-29	10.2	80.6	18.8	0.6	100.0	154	1509
30-39	12.4	77.2	16.7	6.1	100.0	366	2948
40-49	5.7	71.6	21.7	6.7	100.0	120	2090
Current Marital Status							
Currently Married	10.2	77.8	17.5	4.7	100.0	645	6345
Formerly Married	5.0	79.4	17.6	2.9	100.0	34	686
Never Married	1.9	90.9	9.1	0.0	100.0	44	2283
Residence							
Urban	9.6	76.9	17.6	5.4	100.0	476	4973
Rural	5.7	82.2	15.8	2.0	100.0	247	4341
Regions							
Central	9.2	81.0	15.3	3.6	100.0	274	2983
East	6.7	76.4	18.2	5.5	100.0	55	827
West	4.3	81.3	18.8	0.0	100.0	80	1873
South	5.4	90.9	9.1	0.0	100.0	33	608
Ulaanbaatar	9.3	74.7	18.9	6.2	100.0	281	3023
Highest Education Level							
Primary or Less	2.0	95.7	4.3	0.0	100.0	23	1132
Incomplete Secondary	3.3	75.0	23.7	1.3	100.0	76	2280
Complete Secondary	8.8	81.9	12.3	5.7	100.0	227	2570
More than Secondary	11.9	76.6	19.1	4.3	100.0	397	3332
Total	**7.8**	**78.7**	**17**	**4.3**	**100.0**	**723**	**9314**

Among 723 women (8 percent of women) who experienced at least one abortion within the five years preceding the survey, more than three quarters (78 percent) had one abortion, 17 percent had two, and 4.3 percent three or more. Among older women aged 30-39 and 40-49 years who had an abortion, 23 percent and 28 percent, respectively, had more than one abortion. Thus, among women who used abortion to limit their family size, repeated abortion was moderately common.

Rates of Induced Abortion

In this section, rates of induced abortion during the five year period preceding the survey are presented. Three types of rates can be estimated and used: Age-Specific Abortion Rates (ASAR), General Abortion Rate (GAR), and Total Abortion Rate (TAR). The ASARs (which are expressed per 1000 women) represent the probability that women of a given age would have an abortion within a given period of time. The GAR represents the number of abortions per 1000 women aged between 15-49. The

TAR which is a summary measure of ASAR, can be interpreted as the number of abortions a women would have in her reproductive lifetime if experienced the currently prevailing ASAR from age 15 to 49 years.

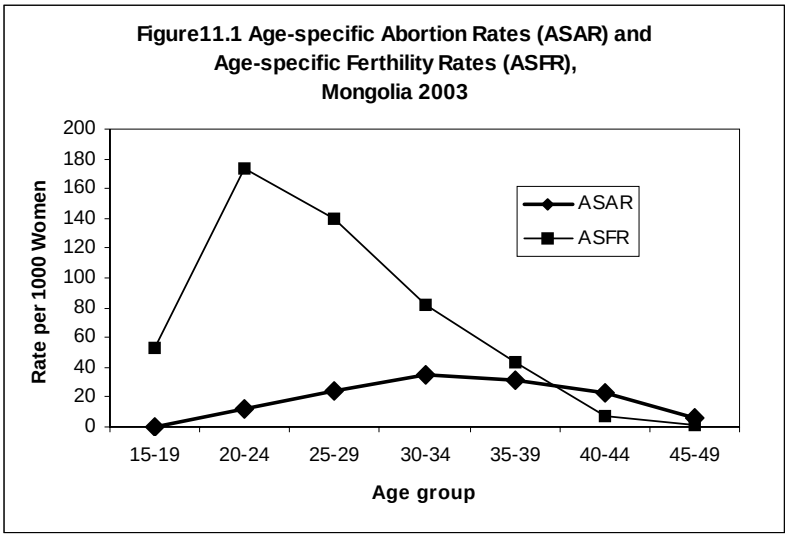
Table 11.03 presents ASARs, GAR, and TAR by rural and urban residence. The age-specific abortion rates show an inverted U-shaped relationship among age groups. Overall, the ASAR increased from very low among women aged 15-19 years, to a broad peak within age groups 30-34 and 35-39 years (35 and 31 percent, respectively), and declined among the older age groups.

Table 11.03 Age-specific Induced Abortion, Total Abortion and General Abortion rates for the Last Five Years Preceding the Survey, by Urban-Rural Residence, Mongolia 2003

Variable & Category	Residence		RHS 2003
	Urban	Rural	Total
Age 5-year Group			
15-19	0.5	0.7	0.6
20-24	16.8	7.2	12.1
25-29	33.9	15.7	24.5
30-34	47.1	21.5	34.6
35-39	38.8	22.4	31.4
40-44	28.2	17.5	23.2
45-49	7.3	3.5	5.7
Abortion Rate			
TAR 15-49 (Per. woman)	0.86	0.44	0.7
GAR (Per. 1000 women)	25.5	13.7	20.0

Note: TAR is Total Abortion Rate
GAR is General Abortion Rate (Induced abortions divided by number of women age 15-49)

Furthermore, Figure 11.1 illustrates age-specific fertility rates and age-specific abortion rates. Overall ASARs were lower than the corresponding age-specific fertility rates (ASFRs) for all age groups, except for age groups 40-44 and 45-49, where they exceeded ASFRs.



The fertility rate was highest in age group 20-24 whereas the abortion rate was highest in age group 30-34 at the same period of time.

Except for age group 15-19, age-specific abortion rates (ASAR) in urban areas exceeded those in rural areas by around 50 percent. At the national level, the urban TAR (0.86 abortion per women) was almost twice higher than the rural TAR (0.44 abortion per woman). For Mongolia, the TAR for the 5 year period preceding the survey was 0.7 abortion per woman. This is the same as the recent estimate of TAR for Uzbekistan (Demographic Health Survey, 1996), but substantially lower than recent estimate in Kazakstan (1.8 abortions per women; Demographic Health Survey, 1995) and in Kyrgyz Republic (1.6 abortions per women; Demographic Health Survey, 1997).

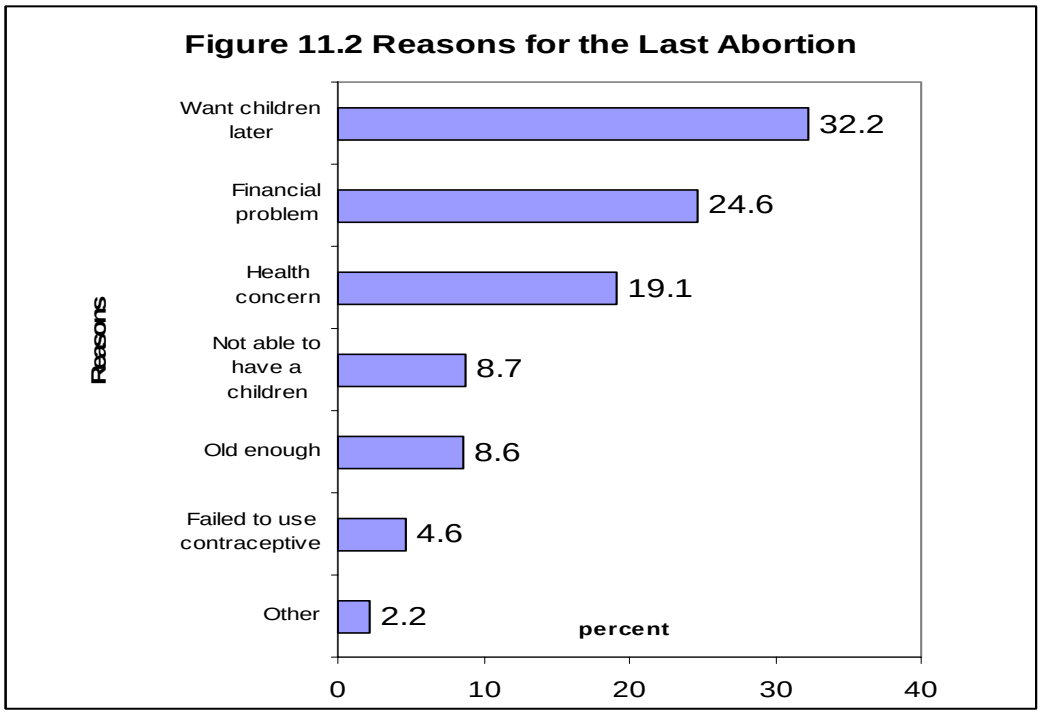
Abortion by Parity

As for the relationship between abortion and the number of children, the survey data indicate that among all women who had an abortion, 42 percent had 1 child, 32 percent had two children, 19 percent had 3 or more children, and 7 percent did not have children. It is interesting to note that women with fewer children were more likely to have abortions.

Reasons for the Last Abortion

In the 2003 Reproductive Health Survey, women who had experienced induced abortions were asked about their reasons for having the last abortion. As shown in Figure 11.2, among all women who had abortions, 32 percent chose abortion because they wanted to have children later, 25 percent stated that lack of financial resources was the reason, 19 percent said that they had a health concern, and 17 percent stated that they were getting older and already had many children.

Figure 11.2 Reasons for the Last Abortion



The remaining 5 percent of women replied that they had an abortion because they lacked knowledge about contraceptives. Women who replied that they wanted children later constituted the highest percentage. This indicates that, although they had made a decision not to give birth at the time of pregnancy, they were not using contraceptives to prevent themselves from unwanted pregnancy. Nearly all women who had induced abortions could have avoided the unwanted pregnancies by using effective modern contraceptive methods.

When women who had induced abortions were asked about their opinions regarding the reasons why people, in general, have abortions, 61 percent of them mentioned financial problems, 11 percent mentioned insufficient knowledge about contraceptives, 10 percent referred to having children later, 6 percent linked the reason with the right to abortion, and another 6 percent explained that some women already have several children and do not want more.

Decision for the Last Abortion and Stage of Pregnancy during the Last Abortion

Table 11.04 Percentage of women by abortion decisions, age groups and marital status, Mongolia 2003

	Who made abortion decision					
	Herself	With husband	Husband/ Partner	Parents, Sisters/Brothers Friends	Doctor	Number of women who had abortion
Age group						
15-19	0.0	25.0	0.0	50.0	25.0	4
20-24	44.3	43.0	2.5	5.1	5.1	79
25-29	31.8	60.4	0.6	3.9	3.2	154
30-39	38.5	52.5	2.2	0.5	6.3	366
40-49	34.2	60.0	0.8	0.0	5.0	120
Current Marital Status						
Currently Married	31.8	60.0	1.9	0.6	5.7	645
Formerly Married	73.5	14.7	0.0	5.9	5.9	34
Never Married	81.8	0.0	0.0	18.2	0.0	44
Total	**36.8**	**54.2**	**1.7**	**2.0**	**5.4**	**723**

As for the decision to have the most recent abortion, the majority (54 percent) of women decided in consultation wtih their husbands or partners, and 37 percent made the decision alone. Among four adolescents who had abortions, one girl made the abortion decision in consultation with a doctor and the other three decided together with their husbands, parents, relatives and friends (table 11.04).

According to Mongolian abortion regulations, abortion should be performed at the request of the woman involved and per recommendation of the doctors' council within the first 12 weeks or three months of gestation. Late abortion is permitted only during specific circumstances. Nearly all (96 precent) women who had abortions received the abortion during the first trimester of pregnancy and the remaining 4 percent had the abortion when they were pregnant for 4 months and over.

Place of and Fee for the Last Abortion

Table 11.05 shows the precentage of women who had abortions by place of the most recent abortion and by the fee they paid for the abortion service. Among women who had abortions, 28 percent had their last abortion in Ulaanbaatar hospitals, 36 percent in aimag hospitals, 26 percent in private hospitals, 9 percent in soum hospitals while 9 women or 1.2 percent had abortions in non-hospital conditions or at home. According to the health statistics during the same time period (1998-2003), on average about 15 percent of abortions were performed in private hospitals. However the survey revealed that 25 percent of women had abortionz in private hospitals. This finding may indice incomplete reporting of abortion cases performed in private hospitals.

Table 11.05 Percentage of women who had abortion by place of, and fee for the last abortion, Mongolia 2003

Selected characteristics	Place of Abortion					Total
	Ulaanbaatar hospital	Aimag center hospital	Soum hospital	Private hospital	Home and other places	
Expenses associated with abortion						
1-10000	21.0	43.7	9.6	25.7	0.0	**65.1**
10001-20000	45.8	17.6	2.6	33.3	0.7	**21.2**
20001+	35.4	22.9	2.1	22.9	16.7	**6.6**
No expenses	28.0	36.0	28.0	8.0	0.0	**7.0**
Total	**27.7**	**36.4**	**8.9**	**25.9**	**1.2**	**723**

When an abortion is performed per the request of a woman, she must assume the responsibility for the cost. If abortion is advised by doctors' council, the abortion will be free of charge. In terms of payment for the most recent abortion, 65 percent of women reported that they paid up to 10,000 tugrugs, 21 percent paid between 10,000-20,000 tugrugs and 7 percent paid more than 20,000 tugrugs, while 7 percent did not pay a fee. When costs and types of hospitals were examined, the percentage of abortion clients who did not pay at all or paid a small amount was relatively high among women who had abortions in aimag and soum hospitals. Among women who had abortions in Ulaanbaatar and private hospitals, the proportion of those who paid more than 20,000 tugrugs was high (see Table 11.05).

Abortion Services and Counselling

Abortions should be performed in adequately equipped hospitals which meet sanitary conditions, and by medical doctors-obstetricians. The survey results indicate that 92 percent of abortions were supervised by a gynecologist. According to the 1998 Reproductive Health Survey, 98.7 percentage of women who had chosen abortion to terminate their unwanted pregnancies were assisted by a gynecologist.

Around 64 percent of all women who had abortions received pre-abortion counselling. 79 percent of women who had abortions received post-abortion counselling, out of whom 89 percent also were counselled regarding contraceptive use (Table 11.06). The precent distribution of pre-abortion and post-abortion counselling

by residence, geographical region and place of service, did not reveal a significant difference among those catagories. In other words, pre-abortion and post-abortion counselling was equally accessible in both urban and rural areas, as well as in all 4 regions and Ulaanbaatar. Likewise, clients in private hospitals received the same level of pre-abortion and post-abortion counselling services as provided in public hospitals.

Table 11.06 Percent distribution all women who had aborion by pre-abortion and post-abortion counsulling according to residence, Region and Place of Counsulling, Mongolia 2003

Variable / Category	Abortion				Number women who had abortion
	Pre-abortion		Post-abortion		
	Yes	No	Yes	No	
Residence					
Urban	64.7	35.3	77.7	22.3	476
Rural	61.1	38.9	82.2	17.8	247
Region					
Central	62.8	37.2	81	19	274
East	60	40	80	20	55
West	66.2	33.8	86.3	13.8	80
South	78.8	21.2	81.8	18.2	33
Ulaanbaatar	62.3	37.7	75.1	24.9	281
Place of Counselling					
Ulaanbaatar hospital	65.5	34.5	78.5	21.5	200
Aimag center, hospital	63.9	36.1	82.9	17.1	263
Soum center, hospital	53.1	46.9	73.4	26.6	64
Private hospital	65.2	34.8	78.1	21.9	187
At home/ at other	44.4	55.6	55.6	44.4	9
Total	**63.5**	**36.5**	**79.3**	**20.7**	**723**

Around 93 percent of women who had abortions reported that the quality of abortion services offered in hospitals was satisfactory, while 7 percent expressed dissatisfaction. Most of the dissatisfied women were the clients who had received abortions in soum hospitals (Table11.07).

Table 11.07 Percent Distribution of Women who had abortion by assessment of service quality and place of abortion service, Mongolia 2003

	Service Quality	
	Satisfactory	Unsatisfactory
Place of abortion service		
Ulaanbaatar hospital	94.5	5.5
Aimag center, hospital	93.5	6.5
Soum center, hospital	87.5	12.5
Private hospital	91.4	8.6
At home/ at other	100	0
Total	**92.8**	**7.2**

When the women were asked about their reasons for dissatisfaction, 54 percent of the women mentioned that the doctors had left something remaining in their vagina, 27 percent complained about poor services, and 15 percent replied that they had experienced post-abortion complications. The findings indicate that the poor knowledge and skills of the doctors were the primary contributing factors for the women's dissatisfaction of abortion services. The above reasons were more frequently mentioned by women who received abortions in soum hospitals (13 percent), followed by private hospitals (9 percent) and aimag hospitals (7 percent). This implies that there is an urgent need for mid and lower level public and private hospital doctors to receive further hands-on training to improve their skills. On the contrary, clients who received abortion in Ulaanbaatar central hospitals complained more about other services provided in hospitals.

Abortion and Use of Contraceptives

Over half (53 percent) of women replied that they had been using contraceptives prior to having an abortion (Table 11.08). Contrastingly, a great majority (85 percent) of women who had abortions reported they were using contraceptive methods after their abortions. Thus, as compared with the pre-abortion situation (53 percent), the use of contraception increased by about 30 percent. The post abortion use of contraception was lowest among adolescent women aged under 20 years (25 percent), probably due to their irregular sexual relations, while post-abortion contraceptive use was highest among women of aged 30-39 years (89 percent).

Table 11.08 Percent Distribution of Women Who Had Abortion by Contraceptive Method Used Before Induced Abortion and After Induced Abortion According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Contraceptive Use				Number of women who had abortion
	Before Abortion		After Abortion		
	Yes	No	Yes	No	
Age 5-Year Groups					
15-19	0	100	25	75	4
20-24	35.4	64.6	81	19	79
25-29	46.8	53.2	79.9	20.1	154
30-39	60.4	39.6	89.3	10.7	366
40-49	53.3	46.7	81.7	18.3	120
Current Marital Status					
Currently Married	56.4	43.6	87	13	645
Formerly Married	44.1	55.9	67.6	32.4	34
Never Married	13.6	86.4	65.9	34.1	44
Residence					
Urban	52.1	47.9	84.5	15.5	476
Rural	55.5	44.5	85.4	14.6	247
Regions					
Central	58.8	41.2	85.8	14.2	274
East	58.2	41.8	78.2	21.8	55
West	46.3	53.8	86.3	13.8	80
South	57.6	42.4	81.8	18.2	33
Ulaanbaatar	48.4	51.6	85.1	14.9	281
Highest Education Level					
Primary or Less	39.1	60.9	69.6	30.4	23
Incomplete Secondary	43.4	56.6	82.9	17.1	76
Complete Secondary	52.9	47.1	83.3	16.7	227
More than Secondary	56.2	43.8	86.9	13.1	397
Total	**53.3**	**46.7**	**84.8**	**15.2**	**723**

Women who were not using contraceptives prior to their abortions (47 percent) gave the following reasons for not using contraceptives: side effects of contraceptives (12 percent), wanted more children (10 percent), infrequent sexual intercourse (9 percent), were not married (9 percent), and disliked using contraceptives (9 percent). Thus, relatively low use of contraceptives among women who were not in stable sexual relationships, who lacked knowledge about effective contraception and proper use of contraceptive methods, and who were not married, makes them more vulnerable to unwanted pregnancy than other women.

As illustrated in Table 11.09, among women who were using contraception prior to their abortions, 37 percent were using periodic abstinence, 30 percent were taking pills, 15 percent had IUD, and 12 percent were using male condoms. This indicates that periodic abstinence was not a reliable method of contraception. The aforementioned situation demonstrates that failure to follow the instructions of

appropriate and correct use of contraceptives, such as pills and condoms, increased the likelihood of unwanted pregnancy.

Table 11.09 Percent Distribution of Women Who Were Using Contraception Before Abortion By Specific Contraceptive Method According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Contraceptive Method							
	Pills	IUD	Injec-tions	Norplant/ Implant	Diaph./ Foam/ Jelly	Male Condom	Period. Abstinence	Withd-rawal
Age 5-Year Groups								
20-24	46.4	3.6	7.1	0.0	0.0	25.0	14.3	3.6
25-29	41.7	15.3	9.7	0.0	0.0	20.8	20.8	0.0
30-39	28.1	14.0	3.6	0.0	0.5	41.2	41.2	1.4
40-49	18.8	21.9	1.6	0.0	0.0	48.4	48.4	0.0
Current Marital Status								
Currently Married	29.7	15.4	4.9	0.3	0.3	11.5	36.8	1.1
Formerly Married	40.0	6.7	0.0	0.0	0.0	20.0	33.3	0.0
Never Married	50.0	0.0	0.0	0.0	0.0	16.7	33.3	0.0
Residence								
Urban	27.4	11.7	2.8	0.4	0.4	12.1	44.0	1.2
Rural	35.8	20.4	8.0	0.0	0.0	11.7	23.4	0.7
Regions								
Central	28.6	16.8	6.2	0.0	0.0	11.8	35.4	1.2
East	28.1	21.9	3.1	3.1	0.0	15.6	28.1	0.0
West	35.1	16.2	5.4	0.0	0.0	18.9	24.3	0.0
South	63.2	10.5	10.5	0.0	0.0	5.3	10.5	0.0
Ulaanbaatar	27.2	11.0	2.2	0.0	0.7	10.3	47.1	1.5
Highest Education Level								
Primary or Less	44.4	33.3	0.0	0.0	0.0	11.1	11.1	0.0
Incomplete Secondary	51.5	21.2	0.0	0.0	0.0	15.2	9.1	3.0
Complete Secondary	28.3	16.7	7.5	0.8	0.0	11.7	32.5	2.5
More than Secondary	27.8	12.1	4.0	0.0	0.4	11.7	43.9	0.0
Total	**30.4**	**14.8**	**4.7**	**0.3**	**0.3**	**11.9**	**36.6**	**1.0**

Abortion more Convenient than Contraception

While 86 percent of women who had abortions did not agree with the statement “stopping pregnancy with abortion is easier than using contraceptives prior to the pregnancy”, 13 percent of the women supported the statement above and 1.4 percent replied that they did not know. The percentage of women who supported the aforementioned statement was relatively higher among adolescent women aged 15-19 years, women aged 30-39 years, formerly married women and women with less than primary education (between 15 and 26 percent).

Legalization of Abortion

When asked about the legalization of abortion, 53 percent of all 9314 women respondents supported the decision to legalize abortion, while 40 percent disapproved and 7 percent replied that they did not know. On the other hand, 42 percent of all 4212 husbands supported the decision to legalize abortion, with 51 percent opposing it and 7 percent responded "I don't know". When asked to explain their reasons for disapproving the abortion legislation among who disapproved, 28 percent specified that it is harmful to women's health, 9 percent stated that abortion affects population growth negatively, and 1 percent responded that abortion allows for liberal sexual relationships. To the same question, 26 percent of husbands replied that abortion is harmful to the mother's health, 19 percent of husbands acknowledged the negative impact on population growth, 3 percent explained their cultural and religious points of view, and 2 percent replied that abortion allows liberal sexual relationships.

Summary and Conclusion

The pregnancy outcomes for all women aged 15-49 years, within the five years preceding the survey, shows that the majority (78 percent) of pregnancies ended in a live birth, followed by induced abortion (17 percent), and still births and miscarriages (4 and 1 percent, respectively).

Out of 9,314 women respondents in the survey, 723 women (7.8 percent) underwent an induced abortion within the five years preceding the survey, 224 women (2.4 percent) experienced miscarriages, and 56 women (0.6 percent) delivered still births. According to this survey, the abortion ratio for this period was 214 abortions per 1000 live births. The abortion ratio according to the health statistics was 234 per 1000 live births over the same period of time

Overall, 8 percent of women aged 15-49 years had at least one abortion. Among them, 79 percent had one abortion and 21 percent of the women had two or more abortions during the same period of time. The total abortion rate (TAR), the number of abortions per women, was 0.7 abortion per women. The urban total abortion rate (0.9 abortions per women) was almost twice than the rural total abortion rate (0.4). Overall the ASARs were lower than the corresponding age-specific fertility rates (ASFRs) for all age groups, except for age groups 40-44 and 45-49, where they exceeded ASFRs.

Among all women who had abortions, 32 percent chose abortion because they wanted to have children later, 25 percent stated that lack of financial resources was the reason, 19 percent said they had a health concern, and 17 percent stated that they were getting older and already had many children. Nearly all women could have avoided the unwanted pregnancies by using effective contraception.

Majority (54 percent) of women decided to have the most recent abortion during consultation with their husbands or partners, and 37 percent decided alone. Among these women, 28 percent had their most recent abortion in Ulaanbaatar, 36 percent in aimag hospitals, 26 percent in private hospitals and 9 precent in soum hospitals. In terms of payment for the most recent abortion, 65 percent of women

reported that they paid up to 10,000 tugrugs, 21 percent paid between 10,000-20,000 tugrugs and 7 percent paid more than 20,000 tugrugs, while 7 percent did not pay a fee. When women dissatisfied with abortion services were asked about their reasons, 54 percent of them mentioned that the doctors had left something remaining in their vagina, 27 percent complained about poor services, and 15 percent replied that they had experienced post-abortion complications. The findings indicate that the poor knowledge and skills of the doctors were the primary contributing factors for the women's dissatisfaction of abortion services.

About 64 percent of abortion patient recieved pre-abortion counselling and 79 percent received post-abortion counselling. Over half of these women were using contraceptives before their abortions. This number increased to 85 percent post abortion. Prior to their abortions, a sizeable precentage (37 percent) of the women were using periodic abstinence, 30 percent were taking pills and 12 percent were using condom.

Contraceptive failure becaue of incorrect or inappropriate use of temporary methods such as pills and condoms, and relying on ineffective traditional methods, will probably lead to an evelated abortion rate in Mongolia. Thus, the increased prevalence of modern contraceptive use among all women including those who have had abortions, through better quality services with choice and availability of methods, at affordable costs, will replace or reduce the high rate of induced abortion.

When all women and their husbans were asked about the legalization of abortion, 53 percent of all 9314 women respondents supported the decision to legalize abortion, while 40 percent disapproved and 7 percent replied that they did not know. Among all 4212 husbands, 42 percent supported the decision to legalize abortion, with 51 percent opposing it and 7 percent responded "I don't know".

CHAPTER XII

ADOLESCENT REPRODUCTIVE HEALTH

Navch Tumurtolgoi and Oyuntsetseg Mashir

As defined by WHO, "adolescents" are defined as young persons aged 10-19 years old. According to the National Population and Household Census (2001), adolescents constitute 24 percent of the entire population of Mongolia, which is 4.5 percent higher than in 1989. This indicates that there are great reserves for the workforce and population for the development of Mongolia.

One of the main goals of the RHS 2003 is to evaluate the implementation of policies and programmes within the framework of the National Reproductive Health Programme objective that states: "…educate adolescents on reproductive health (RH) knowledge, safe sex behavior, and making proper decision and healthy choice on RH issues..." RHS also aims to provide necessary information for research.

The present survey interviewed women aged 15-49 years for the purpose of analysis. In this chapter the term "adolescents" includes respondents who are young women aged 15-19 years. A total of 1347 women aged 15-19 years were eligible for the present analysis, which aimed to describe the following aspects:

- Adolescent pregnancy and childbirth
- Contraceptive usage among adolescent girls, and their knowledge on contraceptive methods and sexuality
- Knowledge and attitudes on Human Immunodeficiency Virus/ Acquired Immundeficiency Syndrome/Sexually Transmitted Infections (HIV/AIDS/STIs)

Childbirth

Compared with the RHS 1998, 9 percent of adolescents aged 15-19 started childbearing in 2003. This percentage decreased to 7 percent in 1998. Such a reduction may be influenced by accessibility and availability of friendly RH services.

The percentage of women aged 15-19 who were mothers or pregnant with their first child by selected characteristics is shown in Table12.01.

When the age of women who gave birth during adolescence was compared with those in 1998, a slight decrease of 3 points occurred among adolescents aged 17 and 19, while there was an increase by 4 points among adolescents aged 18 (from 14 percent to 18 percent). By residence, percentage of adolescents started childbearing in rural areas was 2.5 times than that in urban areas (12 percent versus 5 percent) in 2003. In 1998, the percentage in rural areas was 2.2 times than that in urban areas (13 percent versus 6 percent). However, there was slight decrease in the percentage of adolescents who started childbearing in both rural and urban areas.

Table 12.01 Percentage of Adolescents 15-19 who are Mothers or Pregnant with Their First Child by Background Characteristics for RHS 1998 and RHS 2003, Mongolia 2003

Background characteristics	1998			2003			
	Adolescent pregnancy		Percentage Started Childbearing	Adolescent pregnancy		Percentage Started Childbearing	Number of Adolescents
	Mothers	Pregnant first child		Mothers	Pregnant first child		
Age							
15	0.7	0.0	0.7	0.6	0.0	0.6	322
16	0.4	0.4	0.7	0.6	0.0	0.6	331
17	5.4	1.7	7.1	3.0	0.8	3.8	265
18	11.5	2.1	13.6	13.7	4.0	17.7	226
19	20.3	5.1	25.4	18.7	3.9	22.7	203
Residence							
Urban	4.7	1.0	5.7	3.4	1.2	4.6	803
Rural	10.3	2.6	12.9	9.9	1.7	11.6	544
Highest Education Level							
Primary or Less	9.2	1.0	10.2	9.3	0.7	10.0	431
Incomplete secondary	6.4	2.1	8.4	3.5	1.3	4.9	595
Complete secondary	6.9	1.9	8.8	6.1	2.6	8.6	313
More than secondary	8.7	0.0	8.7	12.5	0.0	12.5	8
Region							
Central	8.6	2.9	11.5	7.8	1.5	9.3	398
East	4.9	1.0	5.8	9.1	1.0	10.1	99
West	6.1	1.1	7.2	6.0	0.8	6.9	248
South	22.5	3.8	26.3	12.8	2.3	15.1	86
Ulaanbaatar	3.9	0.5	4.4	2.9	1.6	4.5	516
Total	**7.2**	**1.7**	**9.0**	**6.0**	**1.4**	**7.4**	**1347**

When accounting for educational level, adolescent girls with primary and incomplete secondary education, the proportion who gave birth did not significantly change and still remained high over the 5-year period.

Geographically, adolescent childbirths were most common in the Southern region (15 percent) followed by the Eastern region (10 percent), while in Ulaanbaatar the childbearing was lowest (5 percent). Adolescent childbirths in the Eastern region increased by 1.7 fold compared to 1998 level (Table 12.01).

Table 12.01A Percent Distribution of Adolescents Age 15-19 by Number of Children Ever Born According to Single Year of Age, Mongolia 2003

	Children Ever Born			Total	Mean CEB		Number of Adolescents
	0	1	2+		1998	2003	
Age							
15	99.4	0.6	0	100.0	0.01	0.01	322
16	99.4	0.6	0	100.0	0.00	0.01	331
17	97.0	3.0	0	100.0	0.06	0.03	265
18	86.3	13.7	0	100.0	0.12	0.14	226
19	81.3	16.3	2.4	100.0	0.22	0.21	203
Total	**94.0**	**5.6**	**0.4**	**100.0**	**0.08**	**0.06**	**1347**

Overall, 6 percent of adolescent girls gave birth to one child and 0.4 percent had two or more. The mean number of children ever born among adolescents in 1998 survey was 0.08. This number decreased to 0.06 in 2003. The mean children ever born by adolescent mothers increased with age (Table 12.01A).

Knowledge and usage of contraceptives among adolescent girls, and their sexual relations

In the previous section, it has been noted that although adolescent childbirths have been decreasing, they still constitute a significant proportion of all births. Therefore, there is a need to enhance the knowledge of adolescent girls regarding how to avoid unwanted pregnancies and STIs, HIV/AIDS. This section of the report describes their knowledge regarding contraceptive methods, usage of contraceptives and sexual life.

The knowledge of all adolescents and currently married adolescents on contraceptive methods is shown in Table 12.02.

Table 12.02 Percentage of Adolescents Who Know Any Contraceptive Method by Specific Method, Mongolia 2003

Contraceptive method	Adolescents	Currently married
Any method	**91.4**	**100.0**
Any modern method	**91.1**	**100.0**
Pills	78.0	93.5
IUD	64.9	90.9
Injections	59.4	89.6
Norplant/Implant	13.2	22.1
Diaphragm/Foam/Jelly	8.2	9.1
Male Condom	85.1	88.3
Female Condom	61.6	64.9
Female Sterilization	17.7	27.3
Male Sterilization	7.1	13.0
Any Traditional Method	**49.4**	**55.8**
Periodic Anstinence	48.5	50.6
Withdrawal	11.4	32.5
Mean Number of Methods Known	**4.6**	**5.8**
Number of Women	**1347**	**77**

All married adolescents and 91 percent of adolescents aged 15-19 responded that they were familiar with at least one contraceptive method. The fact that 100 percent of married adolescents responded that they were aware of at least one modern contraceptive method was very optimistic (Table 12.02).

Among all adolescents, 91 percent responded that they were familiar with at least one modern contraceptive, and 49 percent knew of a traditional method. Among all adolescents, the most widely known modern contraceptive method was male condoms (85 percent), followed by oral pills (78 percent) and the least known was vasectomy (7 percent), and diaphragms, spermicides and sponges (8 percent). The

highest level of knowledge of a traditional method was periodic abstinence or calendar method (49 percent). The most popular modern methods used among married adolescents were pills (94 percent), IUD (91 percent), injections (90 percent) and male condoms (88 percent). The least known methods were the same as for all adolescents (male sterilization and diaphragm/foam/jelly). Nevertheless, the fact that the knowledge of both modern and traditional contraceptive methods among all adolescents was lower than that among all women (who had participated in the survey) needs to be acknowledged by concerning institutions or agencies.

Table 12.03 summarizes the responses of all adolescent respondents regarding whether they had heard broadcasts regarding family planning on the radio or television within one month prior to the survey. The respondents are categorized by

Table 12.03 Percent Distribution of Adolescents 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 Husband's Summary Information, Mongolia 2003

Background Characteristics	Heard Family Planning Message on Radio or Television					Number of Adolescents
	Radio/ Television	Radio Only	Television Only	Neither	Total	
Age						
15	8.7	2.5	33.5	55.3	100.0	322
16	16.3	2.4	33.5	47.7	100.0	331
17	14.3	4.2	30.6	50.9	100.0	265
18	15.5	6.2	21.2	57.1	100.0	226
19	10.8	8.9	26.1	54.2	100.0	203
Residence						
Urban	16.8	2.1	33.5	47.6	100.0	803
Rural	7.7	7.7	24.3	60.3	100.0	544
Region						
Central	9.5	6.0	38.9	45.5	100.0	398
East	11.1	6.1	15.2	67.7	100.0	99
West	8.9	3.6	16.5	71.0	100.0	248
South	12.8	10.5	26.7	50.0	100.0	86
Ulaanbaatar	18.4	2.1	32.4	47.1	100.0	516
Highest Education Level						
Primary or Less	7.7	5.6	21.8	65.0	100.0	431
Incomplete secondary	15.1	3.5	35.0	46.4	100.0	595
Complete secondary	17.3	4.5	30.7	47.6	100.0	313
More than secondary	0.0	0.0	37.5	62.5	100.0	8
All adolescents (2003)	**13.1**	**4.4**	**29.8**	**52.7**	**100.0**	**1347**
All adolescent husbands (2003)	**6.5**	**6.5**	**30.4**	**56.5**	**100.0**	**46**
All adolescents (1998)	**8.6**	**6.2**	**12.3**	**72.8**	**100.0**	**1273**

selected background characteristics.

Over half of the adolescents (53 percent) reported that they did not hear any messages about family planning on the radio or television (TV), within one month preceding the survey. However, the majority of adolescents received information about family planning by TV (30 percent). Nevertheless, it should be emphasized that

the proportion of adolescents who did not recieve information about FP by radio or TV decreased by 20 points, from 73 percent in 1998 to 53 percent in 2003.

When variation between urban and rural areas was compared, the percentage of rural adolescents who had received information about family planning by radio was about 4 times higher than urban areas (8 percent versus 2 percent), while the percentage of urban adolescents who had recieved information by TV was 10 points higher than that of rural adolescents (34 percent versus 24 percent).

Table 12.03 also reveals that a significantly high percentage of adolescent girls did not receive information about FP by radio or TV, particularly in the Western region (71 percent), among adolescents with primary educational level and less (65 percent) and rural adolescents (60 percent).

As shown in Table 12.03A, overall, 57 percent of all adolescents did not know that contraceptives were provided free charge. The percentage of adolescents who were unaware that contraceptives were available free of charge was especially high among adolescent aged 15 (73 percent), in the Western region (72 percent) and among

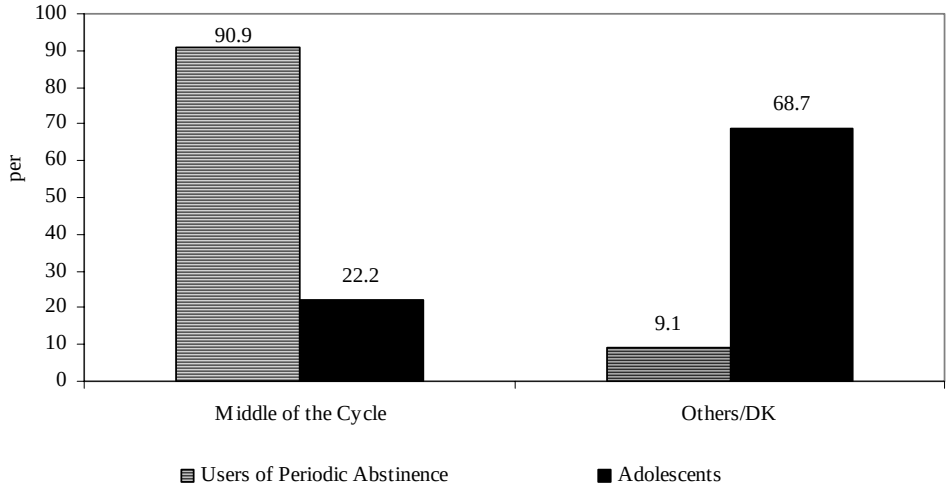
Table 12.03A Percent Distribution of All Adolescent Women by Knowledge That Contraceptives are Distributed Without Charge, According to Background Characteristics, Mongolia 2003

Background Characteristics	Know that contraceptives are distributed without charge		Number of Adolescents
	Yes	No	
Age			
15	27.0	73.0	322
16	44.1	55.9	331
17	47.9	52.1	265
18	45.1	54.9	226
19	55.2	44.8	203
Residence			
Urban	42.5	57.5	803
Rural	42.8	57.2	544
Region			
Central	49.7	50.3	398
East	49.5	50.5	99
West	27.8	72.2	248
South	45.3	54.7	86
Ulaanbaatar	42.4	57.6	516
Highest Education Level			
Primary or Less	34.1	65.9	431
Incomplete secondary	44.0	56.0	595
Complete secondary	51.1	48.9	313
More than secondary	62.5	37.5	8
Total	**42.6**	**57.4**	**1347**

those with primary educational level or less (66 percent).

The percentages of adolescent knowledge regarding the fertile period during the ovulatory cycle and adolescents who use periodic abstinence is shown in Figure 12.1.

Figure 12.1 Percent Distribution of Adolescents by Knowledge of the Fertile Period During the Ovulatory Cycle, for Adolescents and Users of Periodic Abstinence



The majority of periodic abstinence or calendar users (91 percent) answered correctly that they are able to get pregnant during the middle of the ovulatory cycle. However, only small percentage (22 percent) of all adolescents provided the correct answer. Accordingly, 9 percent of calendar users and 69 percent of all adolescents responded that they did not know the answer or provided incorrect answers (Figure 12.1).

Table 12.04 shows the percent distribution of all adolescents by method currently used and age. Among all adolescents, 5 percent were currently using some form of a contraceptive method, consisting of 4 percent using at least one modern method and 1 percent using a traditional method. Among modern methods, the most popular was the male condom (2 percent), followed by the IUD (1.5 percent), while the calendar method (1 percent) was the most popular among traditional methods. The current use of contraceptives increased with age for each method. The highest percentage of users of modern methods were among 19 years of age (15 percent).

Table 12.04 Percent Distribution of All Woman age 15-19 by Contraceptive Method Currently Used, According to Age, Mongolia 2003

	Any method	Any modern method	Any traditional method	Not Currently Using	Number of adolescents
Age					
15	0.3	0.3	0.0	99.7	322
16	0.9	0.6	0.3	99.1	331
17	3.8	3.0	0.8	96.2	265
18	8.8	7.1	1.8	91.2	226
19	17.2	14.8	2.5	82.8	203
Total	**5.1**	**4.2**	**0.9**	**94.9**	**1347**

Table 12.04A presents the percent distribution of currently married adolescents categorized by contraceptive methods currently used, according to selected background characteristics.

In this subsection, the number of cases for analysis was very small (77 married adolescents), therefore the findings need to be interpreted with caution. Among married adolescents, 30 percent were currently using a contraceptive method and 27 percent reported using a modern method. From the Table 12.04A, IUD was the most popular method (12 percent), followed by pills (7 percent) and male condoms (4 percent).

Among regions, the current contraception use was lowest in the Western region (9 percent), while in the Eastern region current use was the highest (50 percent). However, current use of traditional methods was the highest in Ulaanbaatar (5 percent). Interestingly, the use of contraception, including the use of modern methods, decreased as the educational level increased. Among married adolescents who responded that they did not currently use any contraceptive method but intended to do so in future, 47 percent chose IUDs and 26 percent preferred pills for future use.

Table 12.04A Percent Distribution of Currently Married Adolescents by Contraceptive Method Currently Used, According to Selected Background Characteristics, Mongolia, 2003

Background Characteristics	Any Method	Any Modern Method	Modern Method						Any Traditional Method	Traditional Method	Nor Currently Using	Total	Number of Adolescents
			Pills	IUD	Injections	Norplant/ Implant	Male Condom	Female Sterilization		Periodic Abstinence			
Age													
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	1
17	20.0	20.0	0.0	10.0	0.0	0.0	0.0	10.0	0.0	0.0	80.0	100.0	10
18	21.4	21.4	0.0	17.9	3.6	0.0	0.0	0.0	0.0	0.0	78.6	100.0	28
19	39.5	34.2	13.2	7.9	2.6	2.6	7.9	0.0	5.3	5.3	60.5	100.0	38
Residence													
Urban	31.0	24.1	6.9	13.8	0.0	0.0	3.4	0.0	6.9	6.9	69.0	100.0	29
Rural	29.2	29.2	6.3	10.4	4.2	2.1	4.2	2.1	0.0	0.0	70.8	100.0	48
Region													
Central	40.6	37.5	9.4	12.5	3.1	3.1	6.3	3.1	3.1	3.1	59.4	100.0	32
East	50.0	50.0	0.0	33.3	0.0	0.0	16.7	0.0	0.0	0.0	50.0	100.0	6
West	9.1	9.1	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0	90.9	100.0	11
South	22.2	22.2	0.0	11.1	11.1	0.0	0.0	0.0	0.0	0.0	77.8	100.0	9
Ulaanbaatar	21.1	15.8	10.5	5.3	0.0	0.0	0.0	0.0	5.3	5.3	78.9	100.0	19
Highest Education Level													
Primary or Less	40.6	37.5	9.4	12.5	6.3	3.1	3.1	3.1	3.1	3.1	59.4	100.0	32
Incomplete Secondary	22.7	22.7	0.0	18.2	0.0	0.0	4.5	0.0	0.0	0.0	77.3	100.0	22
Complete Secondary	21.7	17.4	8.7	4.3	0.0	0.0	4.3	0.0	4.3	4.3	78.3	100.0	23
Number of Living Children													
None	9.7	6.5	3.2	0.0	0.0	0.0	3.2	0.0	3.2	3.2	90.3	100.0	31
One	45.2	42.9	9.5	21.4	4.8	0.0	4.8	2.4	2.4	2.4	54.8	100.0	42
Two	25.0	25.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	75.0	100.0	4
Total	**29.9**	**27.3**	**6.5**	**11.7**	**2.6**	**1.3**	**3.9**	**1.3**	**2.6**	**2.6**	**70.1**	**100.0**	**77**

Table 12.05 presents information about age during first sexual intercourse of adolescents categorized by background characteristics. 84 percent of adolescents reported never having had sexual intercourse. The percentage of first sexual intercourse increased with age: between the ages of 11-13 years, less than 1 percent had first sexual intercourse; during the ages of 14 to 16 only 6 percent had experienced sexual intercourse; and between the ages of 17-19, 10 percent. By residence, the percentage of rural adolescents who reported that they had sexual intercourse, was higher by 3 points compared to their urban counterparts (18 percent versus 15 percent).

Table 12.05 Age at First Sexual Intercourse of Adolescents, According to Background Characteristics, Mongolia 2003

Background Characteristics	No Sexual Intercourse	Age at First Sexual Intercourse			Total
		11-13	14-16	17-19	
Age					
15	98.8	0.6	0.6	0.0	322
16	97.0	0.3	2.7	0.0	331
17	85.7	0.4	10.2	3.8	265
18	66.8	0.0	8.8	24.3	226
19	55.2	0.0	8.4	36.5	203
Residence					
Urban	85.2	0.1	3.9	10.8	803
Rural	81.8	0.6	8.1	9.6	544
Region					
Central	83.9	0.3	6.3	9.5	398
East	79.8	0.0	8.1	12.1	99
West	87.1	1.2	5.6	6.0	248
South	74.4	0.0	9.3	16.3	86
Ulaanbaatar	84.5	0.0	3.9	11.6	516
Highest Education Level					
Primary or Less	84.7	0.7	7.9	6.7	431
Incomplete secondary	91.3	0.2	3.9	4.7	595
Complete secondary	69.6	0.0	5.4	24.9	313
More than secondary	37.5	0.0	12.5	50.0	8
Total	**83.8**	**0.3**	**5.6**	**10.3**	**1347**

Especially, the percentage of adolescents living in the countryside, who reported that their first sexual intercourse occurred during the ages of 11-16, was two-fold higher when compared to adolescents living in urban areas. This statistic also varies by region. For example, the highest percentage of adolescents who experienced their first sexual intercourse, during the ages of 11-13 was in the Western region, while for ages 14-16 and ages 17-19, the percentage is highest in the Southern region.

During the month prior to survey, out of 101 adolescent women who reported that they had sexual intercourse, 22 percent used condoms to protect from HIV/STDs. About 37 percent of never married adolescents used condoms, while only 10 percent of married adolescents used condoms. Geographically, a smaller percentage of adolescents reported using condoms in the Eastern region (14 percent) and in the Western region (8 percent) compared to those in the Southern and Central regions (22-36 percent), including Ulaanbaatar (24 percent). The condom use during the most

recent sexual intercourse increased with the increased educational level of adolescents.

Table 12.06 Percentage Distribution of Adolescents Used Condoms to Protect from HIV/STIs During the Month According to Selected Background Characteristics, Mongolia 2003

Background Characteristics	Used Condoms to Protect from HIV/STIs During the Month				Total
	Yes	No (had sexual intercourse with husband/partner)	No	Don't remember	
Age					
15	100.0	0.0	0.0	0.0	1
16	25.0	0.0	75.0	0.0	4
17	17.6	29.4	47.1	5.9	17
18	17.6	29.4	52.9	0.0	34
19	24.4	44.4	31.1	0.0	45
Current Marital Status					
Currently Married	10.3	60.3	29.3	0.0	58
Never Married	37.2	0.0	60.5	2.3	43
Residence					
Urban	35.4	25.0	37.5	2.1	48
Rural	9.4	43.4	47.2	0.0	53
Region					
Central	21.6	37.8	40.5	0.0	37
East	14.3	14.3	71.4	0.0	7
West	7.7	53.8	38.5	0.0	13
South	36.4	18.2	45.5	0.0	11
Ulaanbaatar	24.2	33.3	39.4	3.0	33
Highest Education Level					
Primary or Less	6.1	48.5	45.5	0.0	33
Incomplete secondary	8.7	34.8	56.5	0.0	23
Complete secondary	39.5	25.6	32.6	2.3	43
More than secondary	50.0	0.0	50.0	0.0	2
Total	**21.8**	**34.7**	**42.6**	**1.0**	**101**

Knowledge on and Attitude toward HIV/AIDS and STIs

One of the lead objectives of the National Reproductive Health Programme is to promote awareness of the Human Immunodeficiency Virus/Acquired Immundeficiency Syndrome/Sexually Transmitted Infections (HIV/AIDS/STIs) and safe sexual behavior among families, individuals, and, especially, adolescent boys and girls. The present section will deal with the knowledge and attitude of adolescent girls towards HIV/AIDS and STIs.

Knowledge on HIV/AIDS

The table 12.07 presents information about knowledge of HIV/AIDS categorized by age, marital status, residence, geographic region and education of adolescents. The percentage of adolescents who reported that they had heard of HIV/AIDS decreased from 92 percent in 1998 to 90 percent in 2003, a drop of 2 points. The proportion of adolescents who had heard about HIV/AIDS from mass media (radio, TV and newspaper) decreased over the 5 year period, radio decreased

2.3 times (from 64 percent in 1998 to 28 percent in 2003), TV by 3 points (from 75 percent to 72 percent), newspapers by 11 points (from 58 percent to 47 percent), and friends/relatives by 11 points (from 25 percent to 14 percent).

Meanwhile, the information obtained from pamphlets increased by 1.8 fold (from 8 percent to 14 percent), health workers by 4 points (from 15 percent to 19 percent) and teachers by 3 points (from 19 percent to 22 percent). As in the previous survey, the majority of adolescents received information from TV (72 percent), followed by newspapers (47 percent). Urban adolescents (98 percent) had heard about HIV/AIDS more frequently when compared to rural adolescents (78 percent) by 20 points. This implies to improve co-ordination between international programme, project and national programme for implementing reproductive health programme.

There were also significant differences among regions. For example, in Ulaanbaatar nearly all adolescents (99 percent) had heard about HIV/AIDS. Among adolescents living in the Western and Eastern regions 72 and 84 percent had heard about HIV/AIDS.. Moreover, the percentage of adolescent women who had heard about HIV/AIDS increased as their educational level increased.

The percentage of adolescents who reported that they were aware of HIV/AIDS were categorized by knowledge of preventive methods to avoid HIV/AIDS and other selected characteristics as shown in Table 12.08.

The percentage of adolescents who responded that HIV/AIDS could not be prevented decreased by 2 points (from 7 percent in 1998 to 5 percent in 2003).Those adolescents who had received misinformation decreased by 3 points (from 5 percent to 2 percent).

Table 12.07 Percentage of Adolescents by Knowledge of HIV/AIDS and by Source of Knowledge and Mean Number of Sources Cited, According to Background Characteristics, Mongolia 2003

Background Characteristics	Knows HIV/AIDS	Sources of HIV/AIDS Information											Total	Mean
		Radio	TV	Newspapers	Pamphlets	Health Worker	Mosque, Church	School	Community Meetings	Friends, Relatives	Work Place	Other Sources		
Age														
15	87.3	16.5	69.9	39.1	10.9	15.5	0.0	25.8	1.2	10.6	0.0	0.0	322	2.2
16	92.7	26.3	72.5	47.7	13.0	17.8	0.3	27.8	2.4	13.9	0.0	0.0	331	2.4
17	92.8	30.2	72.5	52.8	15.1	24.5	0.4	25.3	1.1	16.6	0.0	0.4	265	2.6
18	89.4	35.4	72.6	49.1	16.8	21.7	0.0	15.9	3.5	17.3	0.4	0.0	226	2.6
19	88.2	35.5	70.4	49.3	15.8	18.7	0.0	10.8	2.5	13.8	0.5	0.0	203	2.5
Current Marital Status														
Currently Married	87.0	37.7	58.4	42.9	11.7	22.1	0.0	3.9	2.6	14.3	0.0	0.0	79	2.2
Never Married	90.5	27.0	72.4	47.4	14.1	19.2	0.2	23.4	2.1	14.2	0.2	0.1	1268	2.4
Residence														
Urban	98.3	28.0	86.1	57.9	19.6	20.8	0.1	24.5	2.6	17.2	0.2	0.1	803	2.6
Rural	78.3	27.0	50.2	31.3	5.7	17.3	0.2	18.9	1.3	9.7	0.0	0.0	544	2.1
Region														
Central	91.0	20.9	71.1	41.7	9.5	18.8	0.3	24.9	2.0	15.3	0.0	0.0	398	2.2
East	83.8	24.2	48.5	32.3	17.2	24.2	1.0	21.2	1.0	13.1	0.0	0.0	99	2.2
West	72.2	24.6	47.2	31.5	4.4	14.5	0.0	14.1	1.6	5.2	0.0	0.0	248	2.0
South	91.9	37.2	53.5	31.4	7.0	22.1	0.0	24.4	2.3	11.6	0.0	0.0	86	2.1
Ulaanbaatar	99.2	33.3	91.1	64.3	22.5	20.7	0.0	24.0	2.5	18.2	0.4	0.2	516	2.8
Highest Education Level														
Primary or Less	76.1	23.4	50.6	28.8	6.7	13.7	0.0	16.2	1.6	9.3	0.0	0.0	431	2.0
Incomplete Secondary	95.6	25.0	78.5	50.3	15.0	22.0	0.2	28.2	1.7	16.5	0.0	0.2	595	2.5
Complete Secondary	99.0	38.0	87.2	66.1	21.7	22.4	0.3	19.5	3.2	16.3	0.3	0.0	313	2.8
More than Secondary	100.0	37.5	75.0	62.5	25.0	12.5	0.0	12.5	12.5	25.0	12.5	0.0	8	2.8
Total	**90.2**	**27.6**	**71.6**	**47.1**	**14.0**	**19.4**	**0.1**	**22.3**	**2.1**	**14.2**	**0.1**	**0.1**	**1347**	**2.4**

In other words, their knowledge about HIV/AIDS increased only slightly. However, a considerable number of adolescents among various sub-groups responded that HIV/AIDS could not be prevented. For example, prominant among thess sub-groups was rural adolescents (8 percent), adolescents in the Western region (11 percent) and in the Eastern region (13 percent), and adolescents with a primary education (9 percent). The high level of lack of knowledge among these groups is of serious concern.

Out of married adolescents who responded that HIV/AIDS was preventable, 58 percent suggested the use of condoms as a prevention method, 39 percent reported that having only one sexual partner was an effective prevention method and 21 percent reported that avoiding injections was an effective prevention method. The corresponding percentages for unmarried adolescents were 67, 24 and 29 percent. Therefore, never married adolescents displayed a slightly better knowledge regarding HIV/AIDS prevention when compared to married adolescents. When the two survey results were compared, those who responded that condom use was the most effective method to prevent HIV/AIDS infection increased 1.7-fold (from 40 percent in 1998 to 67 percent in 2003). The percentage of those who stated that by avoiding sexual intercourse with commercial sex workers increased 2 fold (3 percent to 6 percent). The percentage of respondents, who stated that by avoiding injections one can prevent HIV/AIDS infection, increased 2.4 fold (12 percent to 29 percent).

In order to investigate whether adolescent knowledge about HIV/AIDS was accurate, the adolescents respondents were asked to answer questions such as “Can a healthy person be infected with HIV?,” “Is AIDS a fatal disease?” and “What are the chances of you contracting the HIV infection?”. The answers are summarized in Table 12.09.

Regarding the question “Can a healthy person carry HIV?,” nearly 63 percent of adolescents, who were aware of AIDS, responded “Yes”, which is the correct answer. The proportion of correct answers increased by 13 points compared to the RHS 1998 (50 percent). The highest proportion of adolescents who gave correct answers in various subgroups was: never married adolescents (63 percent), urban residence (66 percent), Ulaanbaatar region (67 percent), and those who had completed their secondary education (70 percent). Correspondingly, the lowest percentage of those who answered correctly within various subgroups were: married adolescents (57 percent), rural residence (57 percent), the Western region (50 percent), and adolescents with a primary education (55 percent).

When asked “Is AIDS a fatal disease?” 45 percent responded “Sometimes” and 51 percent responded “Almost/Always,” 2 percent of adolescents answered “Almost Never”. No significant changes were observed in comparison to the 1998 data.

And when asked: “What are your chances of contracting the HIV infection?” 75 percent answered “No risk at all,” 19 percent stated “some risk” and 2 percent answered “I don’t know.” The proportion of adolescent girls who responded “some risk” lightly increased when compared to the percentage in the previous survey.

Table 12.08 Percentage of Adolescents who Know of HIV/AIDS by Knowledge of Ways to Avoid HIV/AIDS, and with Misinformation, According to Background Characteristics, Mongolia 2003

Background Characteristics	No Way to Avoid	Ways to Avoid HIV/AIDS								Number of Adolescents
		Abstain from Sex	Use Condoms	One Sex Partner	Avoid Sex Prostit.	Avoid Sex Homosex.	Avoid Transfusions	Avoid Injections	Misinformation Percent*	
Age										
15	5.7	17.4	55.5	18.1	6.0	0.7	11.4	27.8	1.8	281
16	3.3	20.5	67.8	18.2	5.9	0.7	13.0	30.9	2.6	307
17	8.5	19.1	66.3	25.2	5.3	1.2	15.0	30.9	2.8	246
18	3.5	15.8	72.8	30.7	8.4	2.5	15.3	26.7	0.0	202
19	6.7	13.4	76.0	36.9	7.3	2.2	15.1	30.2	2.8	179
Current Marital Status										
Currently Married	9.0	13.4	58.2	38.8	3.0	3.0	14.9	20.9	4.5	68
Never Married	5.2	18.0	67.1	23.6	6.6	1.2	13.7	29.9	1.9	1147
Residence										
Urban	4.2	15.6	73.4	26.5	7.5	1.9	16.0	32.8	1.1	789
Rural	7.7	21.6	54.2	20.7	4.5	0.2	9.6	23.0	3.8	426
Region										
Central	3.9	26.8	60.2	24.6	5.8	0.3	12.4	29.8	3.6	362
East	8.4	27.7	56.6	14.5	6.0	0.0	13.3	26.5	2.4	83
West	10.6	11.2	45.8	17.3	2.2	0.0	7.3	15.1	2.2	179
South	12.7	8.9	64.6	11.4	3.8	1.3	5.1	22.8	2.5	79
Ulaanbaatar	3.1	13.3	80.5	30.5	8.8	2.7	18.4	35.5	0.8	512
Highest Education Level										
Primary or Less	8.8	15.9	50.9	17.1	4.6	0.6	8.8	20.7	2.7	328
Incomplete secondary	4.2	20.4	66.4	22.7	5.6	0.7	13.0	30.1	1.8	569
Complete secondary	4.2	14.8	83.2	35.2	9.7	3.2	20.6	37.1	1.9	310
More than secondary	0.0	12.5	87.5	37.5	12.5	0.0	0.0	37.5	0.0	8
Total	**5.4**	**17.7**	**66.7**	**24.4**	**6.4**	**1.3**	**13.7**	**29.4**	**2.1**	**1215**

* 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 percent because of multiple responses.

Table 12.09 Percent Distribution of Adolescents Who Know of HIV/AIDS by Percieved Risks of HIV/AIDS, According to Background Characteristics, Mongolia 2003

Background Characteristics	Can a Healthy Person Have HIV/AIDS			Is HIV/AIDS a Fatal Disease				Respondent's Chance of Getting HIV/AIDS					Number of Adolescents
	No	Yes	DK/ Missing	Almost Never	Sometimes	Almost Always	DK/ Missing	No Risk at All	Small	Moderate	Great	DK/ Missing	
Age													
15	26.3	61.9	11.7	2.5	51.2	44.1	2.1	77.6	16.4	2.5	0.4	3.2	281
16	30.0	59.9	10.1	1.6	46.3	49.5	2.6	76.2	16.9	4.9	0.3	1.6	307
17	24.8	65.9	9.3	2.8	40.2	54.5	2.4	71.5	23.2	2.4	0.0	2.8	246
18	28.2	61.9	9.9	1.0	40.6	56.4	2.0	72.3	18.3	6.9	1.0	1.5	202
19	20.7	66.5	12.8	2.8	42.5	53.1	1.7	73.2	24.6	1.1	0.0	1.1	179
Current Marital Status													
Currently Married	26.9	56.7	16.4	3.0	41.8	47.8	7.5	77.6	19.4	1.5	0.0	1.5	68
Never Married	26.4	63.2	10.4	2.1	44.9	51.1	1.9	74.3	19.4	3.7	0.3	2.2	1147
Residence													
Urban	24.5	66.0	9.5	1.6	39.7	57.0	1.6	75.2	18.0	4.2	0.5	2.2	789
Rural	30.0	57.0	12.9	3.1	54.0	39.7	3.3	73.2	22.1	2.6	0.0	2.1	426
Region													
Central	26.0	65.7	8.3	3.9	50.6	44.5	1.1	75.1	20.2	3.3	0.0	1.4	362
East	33.7	57.8	8.4	0.0	48.2	47.0	4.8	88.0	4.8	4.8	1.2	1.2	83
West	29.6	50.3	20.1	3.4	53.1	38.0	5.6	62.0	31.8	2.8	0.0	3.4	179
South	36.7	55.7	7.6	3.8	51.9	43.0	1.3	78.5	16.5	2.5	0.0	2.5	79
Ulaanbaatar	22.9	67.2	10.0	0.6	35.9	61.9	1.6	75.6	17.4	4.1	0.6	2.3	512
Highest Education Level													
Primary or Less	31.1	54.6	14.3	3.4	53.7	39.3	3.7	76.8	17.7	2.4	0.3	2.7	328
Incomplete Secondary	25.8	64.0	10.2	1.8	44.3	51.8	2.1	74.9	19.0	3.7	0.4	2.1	569
Complete Secondary	22.6	69.7	7.7	1.6	35.5	61.9	1.0	71.9	21.6	4.5	0.3	1.6	310
More than Secondary	25.0	62.5	12.5	0.0	62.5	37.5	0.0	50.0	37.5	12.5	0.0	0.0	8
Total	**26.4**	**62.9**	**10.7**	**2.1**	**44.7**	**50.9**	**2.2**	**74.5**	**19.4**	**3.6**	**0.3**	**2.1**	**1215**

When asked the question: "How would you treat a person with HIV?," 40 percent of adolescents responded "as usual", 31 percent "Will try to avoid the transmission", 14 percent "Will try to understand and help", 11 percent answered "Such person should be isolated from the community" and 4 percent answered "I don't know" (Table 12.10).

The proportion of adolescents who answered "As usual" increases with age of 15-16 by 4 points (from 35 percent to 39 percent), 16-17 by 6 points (from 39 percent to 45 percent) respondents, while the response "Such person should be isolated from the community" was given more often by married adolescents, rural adolescents, adolescents in the Western region and adolescents with a primary education.

Table 12.10 Percent Distribution of Adolescents Who Know How to Treat Persons Infected With HIV/AIDS, According to Background Characteristics, Mongolia 2003

Background Characteristics	How to Treat Persons With HIV/AIDS					Number of Adolescents
	The same as before	Try not to be infected by HIV/AIDS	Try to understand and help	Isolate from community	DK	
Age						
15	35.2	33.5	17.1	9.6	4.6	281
16	38.8	34.5	13.7	9.1	3.9	307
17	45.1	28.9	8.9	13.0	4.1	246
18	40.6	27.7	14.9	12.4	4.5	202
19	43.0	27.9	12.8	11.7	4.5	179
Current Marital Status						
Currently Married	32.8	32.8	13.4	17.9	3.0	68
Never Married	40.6	31.0	13.5	10.5	4.4	1147
Residence						
Urban	45.6	30.8	12.3	7.9	3.4	789
Rural	30.0	31.5	16.0	16.7	5.9	426
Region						
Central	40.6	26.0	17.7	14.4	1.4	362
East	18.1	39.8	26.5	4.8	10.8	83
West	30.2	29.6	8.4	18.4	13.4	179
South	46.8	29.1	12.7	11.4	0.0	79
Ulaanbaatar	45.9	34.0	10.5	6.8	2.7	512
Highest Education Level						
Primary or Less	29.3	38.7	11.9	15.2	4.9	328
Incomplete Secondary	39.9	30.2	14.9	10.2	4.7	569
Complete Secondary	52.3	23.9	12.9	8.1	2.9	310
More than Secondary	37.5	50.0	12.5	0.0	0.0	8
Total	**40.2**	**31.0**	**13.6**	**10.9**	**4.3**	**1215**

Knowledge about STIs

Table 12.11 presents information regarding adolescent knowledge about STIs categorized by source of knowledge, age, marital status, residence, geographic regions and educational level.

From the table, 89 percent of adolescent girls reported that they had heard about STIs. 60 percent stated that they had heard about STIs from TV, 46 percent from newspapers, and 28 percent from teachers. By residence, similar to the access to information pertaining to HIV/AIDS, more urban adolescents (96 percent) had heard of STIs when compared rural adolescents (77 percent). Furthermore, the percentage of

adolescents knowing about STIs was highest in Ulaanbaatar (98 percent) and lowest in the Western region (69 percent). Also, the percentage of adolescent girls who had heard about STIs increased with increased educational level.

The average number of sources of information pertaining to STIs was 2.4 and there was little variation by age, marital status, residence, region and education.

Among all adolescents, who knew about STIs, 39 percent responded that they knew about the symptoms associated with STIs. Among the most common answers, 27 percent of those who mentioned vaginal discharge, 21 percent answered vaginal itchiness, and 12 percent responded pain during the passing of urine (Table 12.12). A considerably high percentage of adolescents aged 15 years (72 percent), in the Western region (71 percent) and in the Southern region (70 percent), answered that they did not know the common STI symptoms.

Majority of adolescents (91 percent) stated that STIs were preventable, while 2 percent responded that they did not know whether the infections could be prevented. Moreover, in the case of infection, 92 percent reported that they would see a doctor or other medical professional, while 7 percent reported that they would consult their parents.

Table 12.11 Percentage of Adolescents by Knowledge of STIs and by Source of Knowledge and Mean Number of Sources Cited, According to Background Characteristics, Mongolia 2003

Background Characteristics	Knows STIs	Sources of STIs Information										Total	Mean
		Radio	TV	Newspapers	Pamphlets	Health Worker	Mosque, Church	School	Community Meetings	Friends, Relatives	Other Sources		
Age													
15	84.2	15.8	58.4	34.5	8.7	18.0	0.6	34.5	2.5	14.0	0.3	322	2.2
16	89.4	17.5	60.4	45.0	12.4	20.5	1.2	34.4	4.5	20.5	0.0	331	2.4
17	89.8	19.2	59.6	52.1	15.8	24.2	0.8	29.4	3.4	18.9	0.4	265	2.5
18	91.2	32.3	63.7	54.4	16.4	21.2	0.0	19.0	2.7	27.4	0.0	226	2.6
19	89.7	31.5	60.6	47.3	10.3	17.7	0.0	12.8	2.0	22.7	0.0	203	2.3
Current Marital Status													
Currently Married	85.7	28.6	51.9	45.5	10.4	24.7	0.0	3.9	1.3	18.2	0.0	79	2.2
Never Married	88.7	21.6	60.9	45.8	12.7	20.0	0.6	29.1	3.2	20.3	0.2	1268	2.4
Residence													
Urban	96.1	22.7	74.1	55.2	16.6	21.9	0.5	31.4	3.9	24.5	0.2	803	2.6
Rural	77.4	21.1	40.1	32.0	6.6	18.0	0.7	22.1	2.0	13.6	0.0	544	2.0
Region													
Central	88.4	16.1	58.3	39.4	9.8	21.9	0.3	27.1	2.3	19.3	0.0	398	2.2
East	84.8	25.3	38.4	35.4	8.1	27.3	2.0	27.3	1.0	25.3	0.0	99	2.2
West	69.0	17.7	37.9	29.4	7.3	14.1	0.8	18.1	2.8	11.3	0.4	248	2.0
South	93.0	29.1	38.4	36.0	9.3	25.6	1.2	30.2	4.7	12.8	0.0	86	2.0
Ulaanbaatar	98.1	26.9	80.6	62.2	18.6	20.0	0.4	32.2	4.1	25.2	0.2	516	2.8
Highest Education Level													
Primary or Less	75.2	19.5	45.0	26.7	6.3	12.8	0.7	22.3	1.6	13.9	0.2	431	2.0
Incomplete Secondary	92.9	18.8	64.2	48.9	13.6	24.4	0.8	33.3	4.4	20.7	0.2	595	2.5
Complete Secondary	98.4	31.9	74.1	66.1	19.5	22.7	0.0	24.3	2.6	27.2	0.0	313	2.7
More than Secondary	100.0	12.5	62.5	50.0	0.0	37.5	0.0	25.0	12.5	37.5	0.0	8	2.4
Total	**88.6**	**22.0**	**60.4**	**45.8**	**12.5**	**20.3**	**0.6**	**27.6**	**3.1**	**20.1**	**0.1**	**1347**	**2.4**

Table 12.12 Percentage Adolescents Who Know of STIs by Knowledge of Symptoms of STIs, According to Background Characteristics, Mongolia 2003

Background Characteristics	DK symptoms	Symptom of STIs														Total
		Abdominal Pain	Genital discharge	Burning pain on urination	Redness in genital area	Irritating in genital area	Swelling in genital area	Genital sores	Genital warts	Blood in urine	Loss of weight	Skin infection	Infertility	Impotence	Other	
Age																
15	72.0	3.7	19.2	7.4	6.6	14.8	3.3	3.3	7.0	1.5	1.5	0.0	0.0	0.0	0.4	271
16	61.8	9.1	23.3	10.5	9.8	20.6	3.4	4.7	12.2	1.4	0.3	0.7	0.0	0.3	1.0	296
17	57.1	7.6	30.7	14.7	13.4	25.6	5.5	7.6	11.3	1.3	2.1	3.4	1.3	1.3	0.8	238
18	52.9	9.2	34.5	17.0	12.6	25.7	2.4	6.3	11.7	1.5	0.0	1.5	1.5	0.5	0.0	206
19	58.2	7.1	31.3	12.6	9.9	20.3	4.9	7.7	15.9	3.8	1.1	1.6	0.5	0.5	0.0	182
Current Marital Status																
Currently Married	53.0	12.1	31.8	15.2	9.1	19.7	7.6	10.6	13.6	6.1	1.5	3.0	1.5	1.5	0.0	68
Never Married	61.6	7.0	26.7	11.8	10.4	21.2	3.6	5.4	11.1	1.5	1.0	1.2	0.5	0.4	0.5	1125
Residence																
Urban	58.8	5.8	30.4	14.0	11.1	22.9	4.0	6.3	10.4	2.2	1.0	1.7	0.8	0.8	0.4	772
Rural	65.3	10.0	20.7	8.6	8.8	17.8	3.6	4.5	13.1	1.0	1.0	0.7	0.2	0.0	0.7	421
Region																
Central	65.6	7.7	22.4	8.8	6.8	16.8	3.7	5.1	17.0	1.4	0.9	0.6	0.0	0.0	0.6	352
East	46.4	20.2	34.5	11.9	19.0	35.7	8.3	2.4	7.1	0.0	0.0	1.2	1.2	1.2	1.2	84
West	70.8	7.6	16.4	7.6	7.6	15.2	1.2	3.5	6.4	0.6	1.2	0.6	0.0	0.0	0.0	171
South	70.0	6.3	18.8	11.3	5.0	7.5	1.3	5.0	10.0	3.8	0.0	0.0	0.0	0.0	0.0	80
Ulaanbaatar	55.7	4.9	33.8	16.0	13.0	25.9	4.5	7.5	9.9	2.4	1.4	2.4	1.2	1.0	0.6	506
Highest Education Level																
Primary or Less	73.8	6.5	16.0	7.4	4.9	12.7	3.1	2.5	5.2	1.2	1.2	0.3	0.0	0.0	0.6	324
Incomplete Secondary	61.5	8.5	25.5	12.3	9.4	20.4	3.8	5.4	12.3	1.6	0.5	1.1	0.2	0.5	0.7	553
Complete Secondary	47.7	6.2	40.6	16.6	17.2	30.8	4.9	9.7	15.6	2.6	1.3	2.6	1.9	1.0	0.0	308
More than Secondary	37.5	0.0	50.0	12.5	25.0	37.5	0.0	0.0	25.0	0.0	12.5	12.5	0.0	0.0	0.0	8
Total	**61.1**	**7.3**	**27.0**	**12.1**	**10.3**	**21.1**	**3.9**	**5.7**	**11.3**	**1.8**	**1.0**	**1.3**	**0.6**	**0.5**	**0.5**	**1193**

Summary and Conclusion

During the 5-year period between the RHS 1998 and the RHS 2003, the prercentage of adolescents who had began childbearing decreased from 9 percent in 1998 to 7 percent in 2003. However, in 1998, this statistic was higher in rural areas (13 percent) than in urban areas by (6 percent) by 2.2 times. However in 2003, the percentage decreased both in urban areas (12 percent) and in rural areas (5 percent), the difference of increase was by 2.5 fold.

The fact that 91 percent of all adolescents responded that they know at least one modern contraceptive method is promising. However, adolescent knowledge about both modern and traditional contraceptive methods was lower than that of all women. This issue needs to be carefully considered and rectified. Among all adolescents, 4 percent reported that they were currently using a modern contraceptive method, while among married adolescents, 27 percent stated that they were currently using a modern method. Interestingly, the use of contraception, including the use of modern methods, decreased as the educational level of the adolescents increased.

Among adolescents, 16 percent reported having had sexual intercourse. 18 percent of adolescents living in rural areas reported that they had experienced sexual intercourse, was higher when compared to those adolescents living in urban areas (15 percent) by 3 points.

The percentage of adolescents who had heard of AIDS decreased from 92 percent in 1998 to 90 percent in 2003. Among adolescents who knew about HIV/AIDS, the percentage who responded that HIV/AIDS cannot be prevented and those who had been misinformed decreased by 2 points (from 7 percent in 1998 to 5 percent in 2003) and 3 points (from 5 percent in 1998 to 2 percent in 2003) respectively. In other words, adolescent knowledge regarding HIV/AIDS increased. Moreover, 91 percent of respondents stated that STIs were preventable, and in the case of infection, they stated that they would see a doctor or another medical professional.

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APPENDIX A

QUALITY OF THE DATA—NONSAMPLING ERROR

Amarbal Avirmed

This appendix provides data users with an overview of the quality of the data of the Reproductive Health Survey-2003 (RHS-2003). 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-2003 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 14, 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.

Overall, the quality of data collected by the RHS-2003 is excellent.

Table A.01 Single-Year Age Distribution of the De Facto Household Population by Sex, Mongolia 2003

	Males		Females			Males		Females	
Age	Number	Percentage	Number	Percentage	**Age**	Number	Percentage	Number	Percentage
0	395	2.6	358	2.1	36	215	1.4	274	1.6
1	361	2.4	344	2.0	37	204	1.3	290	1.7
2	342	2.2	374	2.2	38	197	1.3	266	1.6
3	424	2.8	404	2.4	39	222	1.4	301	1.8
4	407	2.7	387	2.3	40	240	1.6	252	1.5
5	396	2.6	365	2.2	41	195	1.3	263	1.6
6	409	2.7	373	2.2	42	176	1.1	252	1.5
7	374	2.4	394	2.3	43	211	1.4	282	1.7
8	382	2.5	360	2.1	44	193	1.3	234	1.4
9	376	2.4	380	2.2	45	148	1.0	191	1.1
10	358	2.3	375	2.2	46	125	0.8	199	1.2
11	437	2.8	387	2.3	47	145	0.9	170	1.0
12	420	2.7	449	2.7	48	143	0.9	130	0.8
13	501	3.3	492	2.9	49	108	0.7	128	0.8
14	451	2.9	558	3.3	50	72	0.5	112	0.7
15	436	2.8	329	1.9	51	90	0.6	103	0.6
16	406	2.6	333	2.0	52	56	0.4	69	0.4
17	385	2.5	272	1.6	53	92	0.6	99	0.6
18	338	2.2	222	1.3	54	67	0.4	75	0.4
19	269	1.8	208	1.2	55	55	0.4	74	0.4
20	252	1.6	251	1.5	56	46	0.3	56	0.3
21	243	1.6	279	1.7	57	48	0.3	62	0.4
22	255	1.7	275	1.6	58	62	0.4	57	0.3
23	251	1.6	290	1.7	59	48	0.3	43	0.3
24	243	1.6	341	2.0	60	51	0.3	47	0.3
25	262	1.7	302	1.8	61	66	0.4	41	0.2
26	211	1.4	306	1.8	62	40	0.3	59	0.3
27	233	1.5	305	1.8	63	54	0.4	65	0.4
28	227	1.5	287	1.7	64	28	0.2	44	0.3
29	223	1.5	311	1.8	65	31	0.2	54	0.3
30	228	1.5	299	1.8	66	42	0.3	30	0.2
31	233	1.5	314	1.9	67	31	0.2	35	0.2
32	199	1.3	289	1.7	68	30	0.2	39	0.2
33	229	1.5	311	1.8	69	22	0.1	38	0.2
34	216	1.4	320	1.9	70 +	201	1.3	309	1.8
35	230	1.5	306	1.8					
					Total	15,356	100.0	16,893	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 2003

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	2,261.0	-	-	-	-
15-19	1,364.0	14.5	1,347.0	14.5	98.8
20-24	1,436.0	15.3	1,423.0	15.3	99.1
25-29	1,511.0	16.1	1,504.0	16.1	99.5
30-34	1,533.0	16.3	1,524.0	16.4	99.4
35-39	1,437.0	15.3	1,426.0	15.3	99.2
40-44	1,283.0	13.7	1,276.0	13.7	99.5
45-49	818.0	8.7	814.0	8.7	99.5
50-54	458.0	-	-	-	-
15-19	9,382.0		9,314.0	-	99.3

' This is distribution of age declared in the household questionnaire, and differs slightly from the age declared in the individual quistionnaire (compare with table 2.08)

APPENDIX B

SAMPLING VARIABILITY

Amarbal Avirmed

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 2003 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 2003 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 2003 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 <u>all but one</u> clusters in the calculation of estimates. Pseudo-independent replications are thus created. In the RHS-2003 there were 280 clusters; hence, 280 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 32.8%, and its standard error is 0.7%. 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 31.3% and 34.2%.

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 2.2 percent, 3.2 percent, and 3.0 percent, respectively. For the five regions, the relative standard error of the variable IUD varies between 3.9 percent and 7.4 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 3-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)

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 2,4 and 2,6 children per woman, and that the infant mortality rate for the 3-year period prior to the survey lay between 23 and 35 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, 2003

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
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
ABORT	% who have aborted	Women with unwanted pregnancy
TFR-3	Total fertility rate, last 3 years	Women years of exposure
IMR-3	Infant mortality rate, 3 years	Children years of exposure

Table B.02 Sampling Errors - National Sample, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.433	0.730	9314	1.659	0.010	74.974	77.893
CEB	2.263	0.022	9314	1.044	0.010	2.219	2.307
CEB40	4.345	0.058	2090	1.259	0.013	4.229	4.461
MAR20	25.920	0.715	6547	1.321	0.028	24.490	27.351
CMAR	68.123	0.514	9314	1.064	0.008	67.096	69.151
CUSE	68.968	0.654	6345	1.126	0.009	67.660	70.276
IUD	32.782	0.714	6345	1.212	0.022	31.353	34.210
PILL	10.969	0.444	6345	1.132	0.041	10.081	11.858
NOMORE	63.231	0.675	6345	1.116	0.011	61.880	64.582
IDEAL	3.241	0.015	9314	1.223	0.005	3.211	3.270
DIE	56.796	0.665	8902	1.266	0.012	55.467	58.126
NORISK	75.657	0.588	8902	1.293	0.008	74.481	76.833
ABORT	7.763	0.324	9314	1.168	0.042	7.115	8.410
TFR-3	2.496	0.059	-	-	0.023	2.379	2.613
IMR-3	29.473	3.01	-	-	0.1	23.453	35.493

Table B.03 Sampling Errors - Urban Areas, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.573	0.970	4973	1.615	0.013	74.633	78.514
CEB	1.932	0.033	4973	1.285	0.017	1.866	1.999
CEB40	3.757	0.081	1150	1.433	0.022	3.594	3.919
MAR20	23.010	0.950	3442	1.324	0.041	21.110	24.910
CMAR	63.040	0.698	4973	1.019	0.011	61.645	64.435
CUSE	69.410	0.973	3135	1.182	0.014	67.463	71.356
IUD	28.708	0.919	3135	1.137	0.032	26.870	30.546
PILL	11.069	0.636	3135	1.134	0.057	9.797	12.340
NOMORE	60.191	1.019	3135	1.166	0.017	58.153	62.230
IDEAL	3.183	0.021	4973	1.387	0.007	3.140	3.225
DIE	63.458	0.947	4904	1.377	0.015	61.565	65.352
NORISK	74.816	0.907	4904	1.462	0.012	73.003	76.630
ABORT	9.572	0.501	4973	1.201	0.052	8.569	10.574
TFR-3	2.137	0.073	-	-	0.034	1.991	2.284
IMR-3	26.868	4.415	-	-	0.164	18.037	35.698

Table B.04 Sampling Errors - Rural Areas, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.3	1.077	4341	1.668	0.014	74.118	78.428
CEB	2.6	0.032	4341	0.982	0.012	2.576	2.706
CEB40	5.1	0.08	940	1.167	0.016	4.905	5.225
MAR20	29.1	1.087	3105	1.332	0.037	26.973	31.32
CMAR	73.9	0.77	4341	1.155	0.01	72.407	75.485
CUSE	68.5	0.901	3210	1.099	0.013	66.734	70.338
IUD	36.8	1.114	3210	1.309	0.03	34.532	38.988
PILL	10.9	0.628	3210	1.143	0.058	9.616	12.129
NOMORE	66.2	0.934	3210	1.119	0.014	64.331	68.068
IDEAL	3.3	0.024	4341	1.291	0.007	3.259	3.355
DIE	48.6	1.008	3998	1.275	0.021	46.609	50.64
NORISK	76.7	0.739	3998	1.105	0.01	75.21	78.167
ABORT	5.7	0.39	4341	1.108	0.068	4.91	6.469
TFR-3	2.9	0.079	-	-	0.027	2.736	3.052
IMR-3	32.5	4.12	-	-	0.127	24.297	40.778

Table B.05 Sampling Errors - Primary or Less, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	74.716	1.662	969	1.19	0.022	71.392	78.041
CEB	2.085	0.085	969	0.932	0.041	1.916	2.254
CEB40	6.161	0.157	217	0.877	0.026	5.847	6.476
MAR20	46.809	2.757	376	1.07	0.059	41.295	52.322
CMAR	42.724	1.718	969	1.08	0.04	39.289	46.16
CUSE	57.729	2.602	414	1.071	0.045	52.525	62.934
IUD	33.333	2.367	414	1.02	0.071	28.6	38.067
PILL	8.696	1.324	414	0.955	0.152	6.048	11.343
NOMORE	62.077	2.274	414	0.952	0.037	57.529	66.625
IDEAL	2.995	0.052	969	1.168	0.017	2.891	3.099
DIE	42.401	1.938	783	1.097	0.046	38.525	46.277
NORISK	76.501	1.617	783	1.066	0.021	73.267	79.734
ABORT	2.167	0.398	969	0.85	0.184	1.371	2.963
TFR-3	3.168	0.205	-	-	0.065	2.758	3.577
IMR-3	43.567	9.446	-	-	0.217	24.675	62.458

Table B.06 Sampling Errors - Incomplete Secondary, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.886	0.961	2280	1.088	0.012	74.964	78.808
CEB	2.22	0.053	2280	1.129	0.024	2.114	2.327
CEB40	5.214	0.118	398	1.119	0.023	4.977	5.45
MAR20	38.12	1.556	1372	1.187	0.041	35.007	41.232
CMAR	60.789	1.268	2280	1.24	0.021	58.254	63.325
CUSE	63.348	1.34	1386	1.035	0.021	60.668	66.028
IUD	38.384	1.354	1386	1.036	0.035	35.675	41.092
PILL	8.225	0.777	1386	1.053	0.095	6.67	9.78
NOMORE	64.574	1.378	1386	1.072	0.021	61.818	67.331
IDEAL	3.179	0.028	2280	1.048	0.009	3.123	3.234
DIE	48.57	1.095	2168	1.02	0.023	46.38	50.76
NORISK	75.969	1.06	2168	1.154	0.014	73.85	78.088
ABORT	3.333	0.358	2280	0.952	0.107	2.617	4.049
TFR-3	2.751	0.116	-	-	0.042	2.518	2.983
IMR-3	39.644	6.456	-	-	0.163	26.732	52.555

Table B.07 Sampling Errors - Complete Secondary, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.615	1.155	2570	1.383	0.015	74.305	78.925
CEB	1.99	0.034	2570	0.973	0.017	1.922	2.059
CEB40	4.047	0.103	360	1.049	0.025	3.842	4.252
MAR20	22.669	0.958	1716	0.948	0.042	20.753	24.585
CMAR	67.704	0.96	2570	1.041	0.014	65.784	69.624
CUSE	71.954	1.155	1740	1.072	0.016	69.645	74.263
IUD	35.46	1.219	1740	1.063	0.034	33.022	37.898
PILL	12.356	0.896	1740	1.135	0.072	10.565	14.148
NOMORE	59.54	1.161	1740	0.986	0.019	57.219	61.861
IDEAL	3.197	0.022	2570	1.086	0.007	3.152	3.242
DIE	59.826	1.034	2534	1.061	0.017	57.758	61.894
NORISK	77.506	0.956	2534	1.152	0.012	75.595	79.417
ABORT	8.833	0.544	2570	0.972	0.062	7.744	9.921
TFR-3	2.365	0.088	-	-	0.037	2.189	2.542
IMR-3	29.134	5.361	-	-	0.184	18.413	39.855

Table B.08 Sampling Errors - More than Secondary, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.711	0.974	3332	1.33	0.013	74.763	78.658
CEB	2.568	0.038	3332	1.309	0.015	2.491	2.644
CEB40	3.735	0.066	1087	1.274	0.018	3.603	3.867
MAR20	19.344	0.791	3019	1.1	0.041	17.763	20.925
CMAR	81.303	0.789	3332	1.168	0.01	79.725	82.88
CUSE	72.351	0.929	2709	1.081	0.013	70.493	74.21
IUD	28.424	0.962	2709	1.11	0.034	26.499	30.349
PILL	11.997	0.657	2709	1.053	0.055	10.682	13.312
NOMORE	65.559	1.01	2709	1.106	0.015	63.539	67.579
IDEAL	3.402	0.021	3332	1.157	0.006	3.36	3.444
DIE	63.982	1.024	3315	1.229	0.016	61.933	66.031
NORISK	73.906	0.927	3315	1.215	0.013	72.053	75.76
ABORT	11.915	0.704	3332	1.255	0.059	10.506	13.323
TFR-3	2.417	0.123	-	-	0.051	2.171	2.663
IMR-3	18.081	4.093	-	-	0.226	9.896	26.266

Table B.09 Sampling Errors - Central Region, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	69.125	1.212	2983	1.433	0.018	66.701	71.549
CEB	2.438	0.042	2983	1.125	0.017	2.354	2.522
CEB40	4.554	0.094	662	1.164	0.021	4.367	4.742
MAR20	29.991	1.222	2174	1.243	0.041	27.547	32.434
CMAR	72.712	0.949	2983	1.163	0.013	70.815	74.609
CUSE	70.078	0.994	2169	1.01	0.014	68.091	72.066
IUD	35.316	1.378	2169	1.343	0.039	32.559	38.073
PILL	11.157	0.802	2169	1.185	0.072	9.554	12.76
NOMORE	65.652	0.967	2169	0.948	0.015	63.719	67.586
IDEAL	3.307	0.028	2983	1.269	0.009	3.25	3.363
DIE	55.13	1.116	2875	1.203	0.02	52.899	57.362
NORISK	79.548	0.816	2875	1.085	0.01	77.915	81.18
ABORT	9.185	0.61	2983	1.154	0.066	7.965	10.406
TFR-3	2.62	0.094	-	-	0.036	2.432	2.809
IMR-3	32.667	5.75	-	-	0.176	21.167	44.167

Table B.10 Sampling Errors - East Region, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	76.179	3.141	827	2.119	0.041	69.897	82.461
CEB	2.661	0.062	827	0.774	0.023	2.537	2.785
CEB40	5.21	0.195	200	1.174	0.037	4.82	5.6
MAR20	30.705	2.637	596	1.394	0.086	25.432	35.978
CMAR	74.244	1.922	827	1.263	0.026	70.4	78.088
CUSE	69.544	2.283	614	1.228	0.033	64.977	74.111
IUD	36.482	2.468	614	1.27	0.068	31.545	41.419
PILL	12.541	1.351	614	1.01	0.108	9.838	15.244
NOMORE	59.283	1.998	614	1.007	0.034	55.288	63.278
IDEAL	3.034	0.022	827	0.639	0.007	2.99	3.078
DIE	51.777	2.668	788	1.498	0.052	46.44	57.113
NORISK	82.234	1.811	788	1.329	0.022	78.612	85.855
ABORT	6.651	1.212	827	1.398	0.182	4.226	9.075
TFR-3	2.832	0.2	-	-	0.07	2.433	3.231
IMR-3	34.916	9.961	-	-	0.285	14.993	54.839

Table B.11 Sampling Errors - West Region, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	77.202	1.532	1873	1.58	0.02	74.139	80.266
CEB	2.59	0.041	1873	0.825	0.016	2.509	2.672
CEB40	4.879	0.132	398	1.276	0.027	4.616	5.143
MAR20	19.882	1.45	1358	1.338	0.073	16.983	22.781
CMAR	72.13	1.066	1873	1.028	0.015	69.999	74.261
CUSE	66.173	1.36	1351	1.056	0.021	63.453	68.893
IUD	35.307	1.638	1351	1.259	0.046	32.031	38.583
PILL	8.734	0.866	1351	1.128	0.099	7.001	10.467
NOMORE	68.394	1.509	1351	1.193	0.022	65.375	71.413
IDEAL	3.36	0.038	1873	1.353	0.011	3.284	3.437
DIE	41.753	1.485	1643	1.22	0.036	38.783	44.723
NORISK	66.707	1.18	1643	1.015	0.018	64.347	69.068
ABORT	4.271	0.46	1873	0.983	0.108	3.352	5.19
TFR-3	2.904	0.136	-	-	0.047	2.633	3.176
IMR-3	32.433	5.819	-	-	0.179	20.795	44.072

Table B.12 Sampling Errors - South Region, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	80.921	3.604	608	2.26	0.045	73.713	88.129
CEB	2.513	0.125	608	1.486	0.05	2.263	2.763
CEB40	4.736	0.214	121	1.132	0.045	4.307	5.165
MAR20	33.573	2.796	417	1.207	0.083	27.982	39.164
CMAR	68.75	1.936	608	1.029	0.028	64.878	72.622
CUSE	72.01	2.087	418	0.949	0.029	67.836	76.183
IUD	27.273	2.011	418	0.922	0.074	23.25	31.296
PILL	17.225	2.055	418	1.111	0.119	13.115	21.335
NOMORE	63.876	3.567	418	1.516	0.056	56.742	71.009
IDEAL	3.349	0.058	608	1.176	0.017	3.234	3.464
DIE	57.388	3.475	582	1.694	0.061	50.438	64.338
NORISK	80.069	1.995	582	1.204	0.025	76.079	84.058
ABORT	5.428	0.77	608	0.838	0.142	3.887	6.969
TFR-3	2.97	0.2	-	-	0.067	2.571	3.369
IMR-3	23.411	8.69	-	-	0.371	6.031	40.791

Table B.13 Sampling Errors - Ulaanbaatar, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	82.335	1.09	3023	1.571	0.013	80.156	84.515
CEB	1.728	0.037	3023	1.172	0.021	1.654	1.802
CEB40	3.539	0.105	709	1.516	0.03	3.329	3.748
MAR20	22.577	1.242	2002	1.328	0.055	20.094	25.061
CMAR	59.312	0.853	3023	0.955	0.014	57.606	61.018
CUSE	68.823	1.397	1793	1.277	0.02	66.029	71.617
IUD	27.83	1.159	1793	1.095	0.042	25.512	30.149
PILL	10.429	0.833	1793	1.154	0.08	8.763	12.096
NOMORE	57.613	1.426	1793	1.221	0.025	54.762	60.464
IDEAL	3.136	0.023	3023	1.188	0.007	3.091	3.182
DIE	67.784	1.164	3014	1.368	0.017	65.455	70.113
NORISK	74.253	1.253	3014	1.573	0.017	71.747	76.76
ABORT	9.295	0.621	3023	1.175	0.067	8.054	10.537
TFR-3	1.94	0.086	-	-	0.044	1.769	2.112
IMR-10	24.087	5.78	-	-	0.24	12.526	35.648

Table B.14 Sampling Errors - Age 15-24, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	76.943	1.088	2767	1.359	0.014	74.766	79.119
CEB	0.414	0.016	2767	1.272	0.039	0.382	0.446
CMAR	31.695	1.103	2767	1.247	0.035	29.488	33.901
CUSE	55.758	1.766	877	1.052	0.032	52.226	59.29
IUD	27.594	1.564	877	1.036	0.057	24.466	30.722
PILL	11.973	1.196	877	1.09	0.1	9.581	14.364
NOMORE	21.095	1.452	877	1.054	0.069	18.19	24
IDEAL	2.727	0.02	2767	1.036	0.007	2.687	2.767
DIE	54.154	1.061	2552	1.076	0.02	52.031	56.276
NORISK	74.647	1.041	2552	1.209	0.014	72.565	76.73
ABORT	3	0.3	2767	0.925	0.1	2.399	3.6

Table B.15 Sampling Errors - Age 25-34, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	R+2SE
RADIO	74.711	1.011	3029	1.28	0.014	72.688	76.734
CEB	2.041	0.025	3029	1.14	0.012	1.991	2.091
MAR20	26.279	0.894	3029	1.118	0.034	24.492	28.067
CMAR	83.757	0.671	3029	1.001	0.008	82.415	85.099
CUSE	73.591	0.823	2537	0.94	0.011	71.945	75.237
IUD	37.603	1.138	2537	1.183	0.03	35.328	39.879
PILL	13.283	0.758	2537	1.125	0.057	11.767	14.8
NOMORE	53.015	1.086	2537	1.096	0.02	50.844	55.187
IDEAL	3.177	0.022	3029	1.157	0.007	3.133	3.22
DIE	56.938	1.063	2926	1.161	0.019	54.811	59.064
NORISK	74.71	0.872	2926	1.086	0.012	72.965	76.454
ABORT	11.621	0.62	3029	1.065	0.053	10.381	12.861

Table B.16 Sampling Errors - Age 35-49, Mongolia, 2003

Variable	Value R	Standard Error SE	Number of Cases N	Design Effect DEFT	Relative Error SE/R	Confidence Limits R-2SE	Confidence Limits R+2SE
RADIO	77.516	0.902	3518	1.282	0.012	75.711	79.321
CEB	3.908	0.045	3518	1.363	0.012	3.818	3.999
CEB40	4.345	0.058	2090	1.259	0.013	4.229	4.461
MAR20	25.611	0.913	3518	1.241	0.036	23.785	27.437
CMAR	83.314	0.685	3518	1.09	0.008	81.944	84.685
CUSE	68.918	0.947	2931	1.108	0.014	67.023	70.813
IUD	30.16	0.886	2931	1.045	0.029	28.389	31.932
PILL	8.666	0.577	2931	1.11	0.067	7.512	9.82
NOMORE	84.681	0.65	2931	0.977	0.008	83.381	85.981
IDEAL	3.7	0.023	3518	1.149	0.006	3.655	3.746
DIE	58.645	0.984	3424	1.169	0.017	56.677	60.613
NORISK	77.22	0.844	3424	1.177	0.011	75.532	78.908
ABORT	8.186	0.52	3518	1.125	0.064	7.147	9.226

Appendix C

Steering Committee of Reproductive Health Survey

Steering Committee	Name	Designation
Director	P. Byambatseren	Chairman of National Statistical Office
Secretary	B. Tserenkhand	Director of Population Social Statistics Department , NSO
Member	D. Munkhuu	Senior Adviser of Programme Support Unit, UNFPA
	S. Navch	Programme Officer of UNFPA
	I. Davaadorj	Senior Officer, Ministry of Health
	S. Regzen	Officer, Ministry of Social Welfare Labour
	N. Shinetugs	Adviser of Programme Support Unit, UNFPA
	A. Amarbal	Survey Manager of MON/02/P08 project
	P. Monkhtsetseg	Officer of Population Social Statistics Department , NSO

Working group of Reproductive Health Survey

Working Group	Name	Designation
Director	A. Amarbal	Survey Manager of MON/02/P08 project
Secretary	G. Bayarkhuu	Officer of Population Social Statistics Department , NSO
Member	B. Saranchimeg	Senior Officer of Population Social Statistics Department , NSO
	N. Shinetugs	Adviser of Programme Support Unit, UNFPA, Mongolia
	B. Soyolgerel	Senior Officer, Ministry of Health
	J. Demberelsuren	Officer of Population Health Institute, Ministry of Health
	B. Tsedmaa	Doctor of MCHRC
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MONGOLIAN REPRODUCTIVE HEALTH SURVEY 2003

HOUSEHOLD QUESTIONNAIRE

CLUSTER NUMBER

AIMAG

SOUM

BAGH

HOUSEHOLD NUMBER

AREA*

HEAD OF HOUSEHOLD

*** AREA CODES :**

1. Ulaanbaatar 2. Aimag center 3. Soum center 4. Remote rural

Total number of persons in the list

Total number of 15-49 aged women

Total number of husbands

INTERVIEWER'S NAME/CODE

SUPERVISER 'S NAME/CODE

FIELD EDITOR

KEYED BY

Interview visit

First	Second	Final
Day	Day	Day
Month	Month	Month
Results**	Results**	Results**

Total number of visits

****Results codes**

Completed	1	Refused	5
No household members at home or no competent respondent at home at time of visit	2	Dwelling vacant or address not a dwelling	6
Entire household absent for extended period	3	Dwelling destroyed	7
Postponed	4	Dwelling not found	8
		Other (specify)	9

The following questions refer to the people we just have liste

No.	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) NAME	Relationship to head of the household SEE OUTSIDE OF TABLE	Does (NAME) usually live here ? YES=1 NO=2	Did (NAME) stay here last night ? YES=1 NO=2	SEX Is (NAME) male or female ? MALE=1 FEMALE=2	YEAR BIRTH In what year was (NAME) born?	AGE How old is (NAME) ? (COMPLETE YEAR) CHECK	EDUCATION 6 YEARS AND OVER Has he/she ever been to school? YES=1 NO=2	6 YEARS AND OVER What is the highest level he/she attained? SEE OUTSIDE OF TABLE	AGES 6-24 Is (NAME) still in school? YES=1 NO=2	15 YEARS AND OVER What (NAME'S) current marital status? SEE OUTSIDE OF TABLE	Circle line No. for persons eligible for individual interview	Write line No. for eligible husbands for individual interview
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
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	

CONTINUED OR NOT YES 1 NO 2

CODES 3
RELATIONSHIP

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

Codes 10
Level of education

Grade 1-3	1
Grade 4-8	2
Grade 9-10	3
Professional School	4
Higher	5
Non-educated	6
DK	8

Codes 12
Marital status

Single	1
Married	2
Separated	3
Divorced	4
Widowed	5
Living together	6
DK	8

Total number of eligible women aged 15-49 ☐

Total number of eligible husbands for individual interview ☐

No.	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 OTHER 7 (SPECIFY)	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 able to have a bath 1 ATTACHED not able to have a bath 2 SEPARATE 3	
23	Where is your toilet located	INSIDE APARTMENT/HOUSE 1 OUTSIDE APARTMENT/HOUSE 2	
24	Does your household use electricity?	YES 1 NO 2	26
25	What kind of electricity supply do you have in your household?	CENTRAL 1 DIESEL ONLY 2 DIESEL AND GENERATOR 3 GENERATOR 4	
26	What is the main source of drinking water for members of your household?	CENTRAL / PIPED 1 LOCAL 2 WELL 3 SPRING WATER/ MINERAL SPRING 4 RIVER/SNOW/RAINWATER 5	
27	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	

No.	Questions	Coding Categories	Skip to
28	What is the monthly average income per person of your household? (In tugricks)	NO INCOME LESS THAN 8500 1 8501-21250 2 21251-31875 3 31876-42500 4 42501-53125 5 MORE THAN 53126 6 DON'T KNOW 8	
29	Does your household income enough for average consumption?	YES 1 NO 2 DON'T KNOW 8	
30	Did your household buy goods which cost more than 50 000 tugricks, for the last month?	YES 1 NO 2 DON'T KNOW 8	
31	Can you make savings?	YES 1 NO 2	
32	Does your household have any debt?	YES 1 NO 2	
33	How can you get a large amount of money when your household needs?	SAVING 1 LOAN 2 DONATION 3 SELLING OWN PROPERTY 4 NONE 5 OTHER 6	
34	**Only interviewers will fill out this section** The monthly average income per person of this household as an interviewer observes	NO INCOME LESS THAN 8500 1 8501-21250 2 21251-31875 3 31876-42500 4 42501-53125 5 MORE THAN 53126 6 DON'T KNOW 7 8	

APPROVED BY NATIONAL STATISTICAL OFFICE OF MONGOLIA **N.o .85 .** RHS-2

MONGOLIAN REPRODUCTIVE HEALTH SURVEY 2003

INDIVIDUAL QUESTIONNAIRE

Code

CLUSTER NUMBER ☐☐☐

AIMAG ☐☐

SOUM, DUUREG ☐☐

BAGH/KHOROO ☐☐

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. SOUM 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 ☐☐

RHS-2 page 2

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?	YEAR 19☐☐ DON'T KNOW 98 MONTH ☐☐ 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 soum, or in the countryside?	CITY 1 AIMAG CENTER 2 SOUM 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	Are you literate?	LITERTATE 1 ILLETARATE 2	
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
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	

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No.	Questions and Filters	Coding Categories	Skip to
111	**CHECK: Q106 AND Q107** LITERATE ☐	ILLETARATE ☐ →	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	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	116
113	Have you been married or lived with a man only once, or more than once?	ONCE 1 MORE THAN ONCE 2	
114	**CHECK :113** 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 99 98 MONTH ☐☐ DON' T KNOW 98	
115	How old were you when you started living with him?	AGE ☐☐	
116	Do you usually go to doctor to have medical check-up to prevent from any kind of diseases?	ONCE A QUARTER 1 ONCE A YEAR 2 ONCE A 2-YEAR PERIOD 3 NONE 4 WHEN SICK 5	
117	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 ? **CHECK: Q200**	YES 1 NO 2 →	203
202	How many sons live with you now? How many daughters live with you now?	A. SONS AT HOME ☐☐ B. 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 ?	A. SONS ELSEWHERE ☐☐ B. 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 ☐☐	
208A	**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		
208B	**CHECK: 207** ONE OR MORE LIVE BIRTHS ☐ ↓ NO LIVE BIRTHS ☐ →		210A
209	At what age did you give a birth to your first child?	AGE ☐☐	
210A	Are you pregnant now?	YES 1 NO 2 UNSURE 8 →	212
210B	How many months are you pregnant?	MONTHS ☐	
211	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	

212	At what age did your first menstrual period start?	AGE [ ][ ] NEVER MENSTRUATED 96 → 300 DON'T KNOW 98	
213	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)	
214	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 → 216	
215	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	
216	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, BIRTH AND BREASTFEEDING FOR LAST FIVE YEARS

300 **CHECK Q 207**

ONE OR MORE BIRTHS ☐ NO BIRTHS ☐ → **350**

301A HAVE YOU GIVEN BIRTHS SINCE JANUARY 1, 1998?

YES 1
NO 2 → **350**

301B ENTER THE LINE NUMBER, NAME, SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY1998 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.)

ENTER NUMBER OF BIRTHS SINCE JANUARY, 1998 ☐

302	Please tell me names of all children born since January 1, 1998? Begin with the last birth.	LAST BIRTH **1** NAME	NEXT TO LAST BIRTH **2** NAME	SECOND FROM LAST BIRTH- **3** NAME
303	Is (NAME) twin or not?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
304	Is (NAME) boy or girl?	BOY 1 SON 2	BOY 1 SON 2	BOY 1 SON 2
305	When (NAME) was born?	YEAR ☐☐☐☐ MONTH ☐☐	YEAR ☐☐☐☐ MONTH ☐☐	YEAR ☐☐☐☐ MONTH ☐☐
306	Is (NAME) alive now?	YES 1 → **SKIP TO 308** NO 2	YES 1 → **SKIP TO 308** NO 2	YES 1 → **SKIP TO 308** NO 2
307	How old (NAME) was when he died?	YEAR 1 ☐☐ MONTH 2 ☐☐ DAY 3 ☐☐	YEAR 1 ☐☐ MONTH 2 ☐☐ DAY 3 ☐☐	YEAR 1 ☐☐ MONTH 2 ☐☐ DAY 3 ☐☐
308	At the time you became pregnant did you want to give a birth to (NAME)?	WANTED 1 LATER 2 DID NOT WANT 3	WANTED 1 LATER 2 DID NOT WANT 3	WANTED 1 LATER 2 DID NOT WANT 3

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
309	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 FAMILY DOCTOR D BAGH FELDSHER E FELDSHER F MEDICAL ASSISTANT G OTHER X **(SPECIFY)** NO ONE Y **SKIP TO 311C**	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C FAMILY DOCTOR D BAGH FELDSHER E FELDSHER F MEDICAL ASSISTANT G OTHER X **(SPECIFY)** NO ONE Y **SKIP TO 315A**	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C FAMILY DOCTOR D BAGH FELDSHER E FELDSHER F MEDICAL ASSISTANT G OTHER X **(SPECIFY)** NO ONE Y **SKIP TO 315A**
310	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)**
311A	How many months pregnant were you when you received antenatal care at first time?	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98 **SKIP TO 315A**	MONTHS ☐☐ DON'T KNOW 98 **SKIP TO 315A**
311B	How many times did you receive antenatal care?	NUMBER ☐☐		
311C	**Check: Q112** Marital status	MARRIED L.TOGETHER NEVER MARRIED SEPARATED DIVORCED WIDOWED ☐ **SKIP TO 313A**		
312	Did your husband/partner go along with you to health center when you were pregnant?	YES 1 NO 2 DON'T REMEMBER 8		
313A	Did you have any complications during this pregnancy?	YES 1 NO 2 **SKIP TO 313K**		

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
	So you had complications in carrying this pregnancy. Please tell me the complications you had?			
313B	Did you have vaginal bleeding?	YES 1 NO 2 **SKIP TO 313D**		
313C	How many months of pregnant you had been at that time?	MONTHS ☐☐		
313D	Did you have headache and feel dizzy?	YES 1 NO 2 **SKIP TO 313F**		
313E	Did you have convulsions or fits?	YES 1 NO 2		
313F	Did you have face swelling?	YES 1 NO 2 **SKIP TO 313H**		
313G	How many months pregnant you had been at that time?	MONTHS ☐		
313H	Did you have premature rupture membrane?	YES 1 NO 2 **SKIP TO 313J**		
313I	How many months pregnant you had been at that time?	MONTHS ☐		
313J	Did you get any assistance from a doctor/health worker when you had the complications?	YES 1 NO 2		
313K	When you were pregnant with (NAME) did you have any co-existing diseases? READ LIST	YES NO HEART DISEASE 1 2 KIDNEY DISEASE 1 2 LIVER DISEASE/DISORDER OF GALL BLADDER 1 2 LUNG DISEASE 1 2 DISEASE OF DIGESTIVE APPARATUS 1 2 NERVOUS DISEASE 1 2		

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
314A	Did you receive iron pills anti anemia when you were pregnant with (NAME)?	YES 1 NO 2 **SKIP TO 315A** ◄		
314B	How many iron pills did you take during your pregnancy with (NAME)?	TOTAL ☐☐☐ DON'T KNOW 998		
315A	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
315B	Where did you give birth to NAME? Ulaanbaatar Maternity home No 1, 2, 3 and MCHRC	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOUM) 3 PRIVATE HOSPITAL 4 HOME/OTHER HOME 5 OTHER 6 **(SPECIFY)**	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 HOME/OTHER HOME 5 OTHER 6 **(SPECIFY)**	H. CENTER (CITY) 1 H. CENTER (AIMAG) 2 CLINIC (SOM) 3 PRIVATE HOSPITAL 4 HOME/OTHER HOME 5 OTHER 6 **(SPECIFY)**
315C	Who assisted with the delivery of (NAME)?	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C FELDSHER D MEDICAL ASSISTANT E OTHER X **(SPECIFY)** NO ONE Y	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C FELDSHER D MEDICAL ASSISTANT E OTHER X **(SPECIFY)** NO ONE Y	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C FELDSHER D MEDICAL ASSISTANT E OTHER X **(SPECIFY)** NO ONE Y
316	Was (NAME) delivered by caesarean section?	YES 1 **SKIP TO 318** ◄ NO 2	YES 1 **SKIP TO 318** ◄ NO 2	YES 1 **SKIP TO 318** ◄ NO 2
317A	At the time of the birth of (NAME), did you have injection to intensify the birth?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
317B	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
317C	A lot more vaginal bleeding than normal following childbirth ?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
317D	Did you have blood and blood substituting solution at that time?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
317E	Did you have high blood pressure, convulsions and fits?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
318	Was (NAME) born on time or prematurely or post date?	ON TIME 1 PREMATURELY 2 POST DATE 3 DON'T KNOW 8	ON TIME 1 PREMATURELY 2 POST DATE 3 DON'T KNOW 8	ON TIME 1 PREMATURELY 2 POST DATE 3 DON'T KNOW 8
319	How much did (NAME) weigh? Record weight from health card, IF AVAILABLE	GRAMS FROM CARD 1 GRAMS FROM RECALL 2 GRAMMS NOT WEIGHED 3 GRAMS ☐☐☐☐ DON'T KNOW 9998	GRAMS FROM CARD 1 GRAMS FROM RECALL 2 GRAMMS NOT WEIGHED 3 GRAMS ☐☐☐☐ DON'T KNOW 9998 **SKIP TO 322**	GRAMS FROM CARD 1 GRAMS FROM RECALL 2 GRAMMS NOT WEIGHED 3 GRAMS ☐☐☐☐ DON'T KNOW 9998 **SKIP TO 322**
320A	Did doctor give you advice after you delivered (NAME), within 42 days?	YES 1 NO 2 **SKIP TO 321**		
320B	What kind of advice did you get? STD=Sexually Transmitted Disease	YES NO Breastfeeding 1 2 Neonatal care 1 2 Family planning 1 2 STD 1 2		
321	Has your period returned since the birth of (NAME)?	YES 1 **SKIP TO 323** NO 2 **SKIP TO 324**		
322	Did your period return between the birth of (NAME) and the next pregnancy?		YES 1 NO 2 **(SKIP TO 326)**	YES 1 NO 2 **(SKIP TO 326)**
323	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 326)**	MONTHS ☐☐ DON'T KNOW 98 **(SKIP TO 326)**
324	**CHECK :Q. 209** RESPONDENT PREGNANT?	Not pregnant ☐ Pregnant or unsure ☐ **SKIP TO 326**		
325	Have you resumed sexual relations since the birth of (NAME)?	YES 1 NO 2 **SKIP TO 327**		

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
326	How many months after the birth of (NAME) did you resume sexual relations?	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98	MONTHS ☐☐ DON'T KNOW 98
327	Did you ever breastfeed (NAME)?	YES 1 → SKIP TO 329 NO 2	YES 1 → SKIP TO 333 NO 2	YES 1 → SKIP TO 333 NO 2
328	Why did you not breastfeed (NAME)? CHECK: Q.306. IF CHILD IS DIED, RECORD "O1"	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 335A	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 335C	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 335C
329	When did you start breastfeeding (NAME) after giving a birth?	30 MINUTES 1 30-60 MINUTES 2 24 HOURS 3 MORE THAN 24 HOURS 4 DON'T REMEMBER 8		
330	**CHECK: Q. 306** CHILD ALIVE?	ALIVE ☐ → DEAD ☐ SKIP TO 333A		
331A	Are you still breastfeeding (NAME) ?	YES 1 NO 2 → SKIP TO 333A		
331B	Are you still feeding (NAME) only by breastmilk?	YES 1 → SKIP TO 334A NO 2		
332	At any time yesterday was (NAME) given any of the following in addition to breast milk ? A. Plain water ? B. Tinned or fresh milk ? C. Any other liquids ? D. Any solid or mushy food ?	YES NO DK A. 1 2 8 B. 1 2 8 C. 1 2 8 D. 1 2 8 SKIP TO 334A		

		LAST BIRTH NAME	NEXT TO LAST BIRTH NAME	SECOND FROM LAST BIRTH- NAME
333A	How many months did you breastfeed (NAME)?	MONTHS [ ][ ] DON'T KNOW 98	MONTHS [ ][ ] DON'T KNOW 98	MONTHS [ ][ ] DON'T KNOW 98
333B	Why did you stop breastfeeding (NAME)? **Check: Q.306** IF THE CHILD IS DIED, RECORD "O1".	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)**
334A	**CHECK: Q. 305** AGE	MORE THAN 6 MONTHS [ ] LESS THAN 6 MONTHS [ ] → **SKIP TO 335A**	MORE THAN 6 MONTHS [ ] LESS THAN 6 MONTHS [ ] → **SKIP TO 335C**	MORE THAN 6 MONTHS [ ] LESS THAN 6 MONTHS [ ] → **SKIP TO 335C**
	CHECK: Q. 333A MONTHS BREASTFED	MORE THAN 6 MONTHS [ ] LESS THAN 6 MONTHS [ ] → **SKIP TO 335A**		
334B	Did you feed (NAME) only by breastmilk for first 6 months after the birth?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
335A	Did you receive pregnancy and maternity allowance for delivering "NAME"?	YES 1 NO 2		
335B	Did you receive child care allowance for delivering "NAME"?	YES 1 NO 2		

SECTION 3B. CHILD HEALTH

		LAST BIRTH 1	NEXT TO LAST BIRTH 2	SECOND FROM LAST BIRTH- 3
335	FROM Q.302B AND Q.306C	NAME ALIVE ☐ DEAD ☐ (CHECK Q. 306 OR, IF NO MORE BIRTHS, GO TO 350)	NAME ALIVE ☐ DEAD ☐ (CHECK Q. 306 OR, IF NO MORE BIRTHS, GO TO 350)	NAME ALIVE ☐ DEAD ☐ (CHECK Q. 306 OR, IF NO MORE BIRTHS, GO TO 350)
336	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
337	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES 1 NO 2 **SKIP TO 339** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 339** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 339** DON'T KNOW 8
338	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
339	Did you seek advice or treatment for the cough?	YES 1 NO 2 **SKIP TO 341**	YES 1 NO 2 **SKIP TO 341**	YES 1 NO 2 **SKIP TO 341**
340	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)**
341	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
342	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
343	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 ______
344	Was anything given to treat the diarrhea?	YES 1 NO 2 **SKIP TO 346** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 346** DON'T KNOW 8	YES 1 NO 2 **SKIP TO 346** DON'T KNOW 8
345	What was given to treat the diarrhea? Anything else? O.R.S=Oral Rehydration Solution Solution=All kind of liquids home made RECORD ALL MENTIONED	O.R.S A PILL (antibiotics) B INJECTION C SOLUTION D (I.V.) INTRAVENOUS E HOME REMEDIES/HERBAL MEDICINES F OTHER X **(SPECIFY)**	O.R.S A PILL (antibiotics) B INJECTION C SOLUTION D (I.V.) INTRAVENOUS E HOME REMEDIES/HERBAL MEDICINES F OTHER X **(SPECIFY)**	O.R.S A PILL (antibiotics) B INJECTION C SOLUTION D (I.V.) INTRAVENOUS E HOME REMEDIES/HERBAL MEDICINES F OTHER X **(SPECIFY)**
346	Did you seek advice or treatment for the diarrhea?	YES 1 NO 2 **SKIP TO 348**	YES 1 NO 2 **SKIP TO 348**	YES 1 NO 2 **SKIP TO 348**
347	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)**
348		GO BACK TO 303 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 350	GO BACK TO 303 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 350	GO BACK TO 303 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 350

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No.	Questions and Filters	Coding Categories	Skip to
350	So you gave (NUMBER) births for last five years. Apart from these births, did you get pregnant ending with abortion, still birth and miscarriage?	YES 1 NO 2 →	400
351	In the last five years, how many abortion, still birth and miscarriage did you have? If no abortion **SKIP TO 400.**	MISCARRIAGE 1 STILL BIRTH 2 ABORTION 3	400
352	Please tell me the reason you had the last abortion? Heath concern=Doctors'counseling	OLD ENOUGH 1 NOT ABLE TO HAVE A CHILDREN 2 HAVE ENOUGH CHILDREN 3 FINANCIAL PROBLEM 4 FAILED TO USE CONTRACEPTIVE 5 HEALTH CONCERN 6 OTHER 7 **(SPECIFY)**	
353	How old were you when you had the last abortion?(in completed years)	AGE ☐☐ DON'T KNOW 98	
354	For your last abortion, how many months of pregnant you had been at that time?	MONTHS ☐	
355	For your last abortion, who made a decision to to have abortion? Did you make the decision alone, or did you make decision with someone, or did someone make the decision for you?	MYSELF 1 TOG. WITH HUSBAND/PARTNER 2 HUSBAND/PARTNER 3 PARENTS 4 BROTHERS/SISTERS/RELATIVES/ FRIENDS 5 DOCTOR 6 OTHER 7	
356	Where did you have the last abortion?	ULAANBAATAR, HOSPITAL 1 AIMAG CENTER, HOSPITAL 2 SOUM CENTER, HOSPITAL 3 PRIVATE HOSPITAL 4 AT HOME/OTHER HOME 5 OTHER 6 **(SPECIFY)**	
357	Who assisted you with having the last abortion?	GYNECOLOGIST A OTHER DOCTOR B PROF. MIDWIFE C OTHER WIDWIFE D MEDICAL ASSISTANT E OTHER X **(SPECIFY)** NO ONE Y	
358	For your last abortion, how much you spent for? MNT=tugrick	MNT 1 ☐☐☐☐☐☐ NONE 2 DON'T KNOW 8	

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No.	Questions and Filters	Coding Categories	Skip to
359	For your last abortion, did the doctor give you pre abortion counseling?	YES 1 NO 2	
360	How do you evaluate service quality of the last abortion you had?	SATISFACTORY 1 → UNSATISFACTORY 2	362
361	Why do you evaluate the service quality as unsatisfactory? (WRITE THE ANSWER)	_____ _____ ☐☐	
362	Did you have any complications after having the last abortion?	YES 1 NO 2 →	364
363	What kind of complications did you have?	TOO MUCH BLEEDING 1 TOO MUCH PAIN 2 HAD FEWER 3 HAD REPEATED CURETTAGE 4 OTHER 5 (SPECIFY)	
364A	Did the doctor give you post abortion abortion counselling after the abortion?	YES 1 NO 2 →	365A
364B	Did the doctor give you counseling on contraceptives?	YES 1 NO 2	
365A	Were you using contraceptives when you became pregnant ending with abortion? (If more than one abortion, refer to the last abortion)	YES 1 NO 2 →	366
365B	What kind of contraceptive you used when you became pregnant ending with abortion?	PILL O1 IUD O2 INJECTIONS O3 NORPLANT O4 DIAPHRAGM/FOAM/JELLY O5 MALE CONDOM O6 FEMALE CONDOM O7 FEMALE STERILIZATION O8 MALE STERILIZATION O9 PERIODIC ABSTINENCE 1O WITHDRAWAL 11 OTHER 96 (SPECIFY)	
366A	Did you start using contraceptive after last abortion you had?	YES 1 → NO 2	367
366B	Why do not you use contraceptive? (WRITE THE ANSWER)	_____ _____ ☐☐	

No.	Questions and Filters	Coding Categories	Skip to
367	Please tell me what kind of circumstance led you to have abortion? Mention all answers. Relied on the contraceptive that a respondent was using at that time.	Inadequate knowledge of contraceptives 1 Difficult to obtain contraceptives 2 Did not want to use contraceptives 3 Relied on the contraceptive 4 Other 5 **(SPECIFY)**	
368	What do you think, in what reasons, people have abortion?	OLD ENOUGH 1 NOT ABLE TO HAVE A CHILD 2 HAVE ENOUGH CHILDREN 3 FINANCIAL PROBLEM 4 FAILED TO USE CONTRACEPTIVE 5 HEALTH CONCERN 6 ABORTION IS LEGISLATED 7 OTHER 8 **(SPECIFY)**	
369	Do you agree with that having abortion is more convenient way than using contraceptives?	AGREE 1 DON'T AGREE 2 DON'T KNOW 8	

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,

401 Which ways or methods have you heard about ?	SPONTANEOUS Yes	**402** Have you ever heard of METHOD? Yes No	**402A** From whom did you learn of (METHOD) first time?	**402B** From whom you can get (METHOD)?	**403A** Did you ever use (METHOD)?	**403B** Main difficulties/problems ,if any, in getting or using (METHOD)?
O1 **PILL** "Women can take a pill every day"		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O2 **IUD** "Women can have a loop or coil placed inside them by a doctor or nurse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
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	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O4 **NORPLANT/IMPLANT** "Women can get 6 rods under the skin in the upper arm to prevent pregnancy"		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O5 **DIAPHRAGM/FOAM/JELLY** "Women can place a tissue or a diaphragm or cream in the vagina before intercourse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O6 **MALE CONDOM** "Men can use a rubber sheath sexual intercourse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O7 **FEMALE CONDOM** "Women can use a rubber sheath during sexual intercourse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O8 **FEMALE STERILIZATION** "Women can have an operation to avoid having any more children".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O9 **MALE STERILIZATION** "Men can have an operation to avoid having any more children".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
1O **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	Other ☐☐		YES 1 NO 2	Other ☐☐
11 **WITHDRAWAL** "Men can be careful and pull out before climax".		1 2 3	Other ☐☐		YES 1 NO 2	Other ☐☐
12 Have you heard of any other ways or methods that women or men use to avoid pregnancy ?		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐

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

Coding categories 402A		Coding categories 402B		Coding categories 403B	
MEDICAL WORKERS	01	PUBLIC HOSPITAL	01	NONE	01
HUSBAND/PARTNER	02	PRIVATE HOSPITAL	02	HUSBAND DISAPPROVES	02
FRIENDS	03	PHARMACY	03	LACK OF ACCESSIBLITY/TOO FAR	03
PARENTS/RELATIVES	04	FAMILY DOCTOR	04	COST TOO MUCH	04
FAMILY DOCTOR	05	BAGH FELDSHER	05	INCONVENIENT TO USE	05
BAGH FELDSHER	06	SHOP	06	HEALTH CONCERNS	06
TV, NEWSPAPER, RADIO	07	FRIENDS	07	SIDE EFFECTS	07
TRAINING, LESSON	08	PARENTS/RELATIVES	08		
ADVERTISING MATERIAL	09	RESEARCHERS	09		
RESEARCHERS	10	OTHER	96	OTHER	96
OTHER	96	(SPECIFY)		(SPECIFY)	
(SPECIFY)		DON'T KNOW	98	DON'T KNOW	98

No.	Questions and Filters	Coding Categories	Skip to
405	Have you ever used anything or tried 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 O1 IUD O2 INJECTIONS O3 IMPLANTS/NORPLANT O4 DIAPHRAGM /FOAM/JELLY O5 MALE CONDOM O6 FEMALE CONDOM O7 FEMALE STERILIZATION O8 MALE STERILIZATION O9 PERIODIC ABSTINENCE 1O WITHDRAWAL 11 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.210A: 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 DECLARED SHE WAS STERILIZED IN Q.403, CIRCLE CODE 08 AND SKIP TO Q. 412. OTHERWISE ASK: Which method are you using?	PILL O1 → 410A IUD O2 INJECTIONS O3 IMPLANTS/NORPLANT O4 → 410B DIAPHRAGM /FOAM/JELLY O5 MALE CONDOM O6 FEMALE CONDOM O7 → 410C FEMALE STERILIZATION O8 → 412 MALE STERILIZATION O9 → 411 PERIODIC ABSTINENCE 1O → 410E WITHDRAWAL 11 → 410F OTHER 96 → 411 (SPECIFY)	

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410A	Do you take the pills regularly?	EVERY DAY 1 FORGET SOME DAY 2 → **411**
410B	Do you follow doctor's instruction and get check-ups on time?	YES 1 NO 2 → **411**
410C	Do you always use (METHOD) when you need it?	YES 1 NO 2
410D	Is it possible to obtain (METHOD) when you need it?	YES 1 NO 2 → **411**
410E	Can you have sexual intercourse without contraceptives on certain days of the month when the woman is more likely not to be pregnant?	YES 1 NO 2 → **411**
410F	Does your husband/partner can manage himself to withdraw before ejaculation, every time you have sexual intercourse?	YES 1 NO 2
411	For how many months have you been using (MEDHOD)continuously ?	MONTHS ☐☐ → **413** 8 YEARS OR LONGER 96
412	In what month and year was the sterilization ?	YEAR 19☐☐ MONTH ☐☐ DON'T KNOW 98
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 FAMILY DOCTOR 04 BAGH FELDSHER 05 SHOP 06 FRIENDS 07 PARENTS/RELATIVES 08 RESEARCHER 09 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 LACK OF ACCESS/TOO FAR 02 COSTS 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

No.	Questions and Filters	Coding Categories	Skip to
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 MALE CONDOM O6 FEMALE CONDOM O7 FEMALE STERILIZATION O8 MALE STERILIZATION O9 PERIODIC ABSTINENCE 10 WITHDRAWAL 11 OTHER 96 **(SPECIFY)**	→ 423
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 MALE CONDOM O6 FEMALE CONDOM O7 FEMALE STERILIZATION O8 MALE STERILIZATION O9 PERIODIC ABSTINENCE 1O WITHDRAWAL 11 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	

No.	Questions and Filters	Coding Categories	Skip to
	Continuation of Q.422	**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 54 INTERFERES WITH BODY'S 55 NORMAL PROCESSES 56 OTHER 96 **(SPECIFY)** DON' T KNOW 98	
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 →	429
427	Do you approve of a man having a vasectomy, or do you disapprove, or doesn't it matter to you?	APPROVE 1 →	429
		DISAPPROVE 2	
		DOESN'T MATTER 3 →	429
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	
429	Do you know that contraceptives are distributed without charge?	YES 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

No.	Questions and filters	Coding categories	Skip to
500	**CHECK: Q 410** SHE NOT STERILIZED ☐	SHE STERILIZED ☐ →	506
501	**CHECK: Q 210A** 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? 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?	HAVE A (ANOTHER) CHILD 1 NO MORE/NONE 2 → 505 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED OR DON'T KNOW 4 → 506	
502	How many (more) children do you want?	MORE CHILDREN ☐☐	
503	What is the main reason you want (more) children?	DOES NOT HAVE CHILDREN 1 NOT ENOUGH CHILDREN 2 HAVE NO SON/DAUGHTER 3 CUSTOM OR RELIGION 4 HUSBAND RECOMMENDS 5 HELP FAMILY ECONOMY 6 OTHER 7 **(SPECIFY)**	
504	**CHECK: Q 210A** Not pregnant, unsure ☐ → How long would you like to wait from now before the birth of (a/another) child? Pregnant ☐ → How long would you like to wait after the birth of the child you are expecting before the birth of another child?	WAITING TIME YEARS 1 ☐☐ MONTHS 2 ☐☐ SOON/NOW 993 CAN'T GET PREGNANT 994 → 506 AFTER MARRIAGE 995 OTHER 996 **(SPECIFY)** DON'T KNOW 998	
505	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)**	
506	**CHECK: Q 207** 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 ☐☐ IF NO, RECORD THE REASON _____ _____	

No.	Questions and filters	Coding categories	Skip to
507	Do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVE 1 DISAPPROVE 2 DON'T KNOW 8	
508	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	
509	In the last month have you discussed family planning with your friends, neighbors, or relatives?	YES 1 NO 2 →	511
510	With whom did you discuss ? With anyone else? RECORD ALL MENTIONED.	HUSBAND/PARTNER A PARENT B SISTERS/BROTHERS C DAUGHTER D MOTHER - IN - LAW E FRIENDS F OTHER X (SPECIFY)	
511	**CHECK Q:112** MARRIED OR LIVING TOGETHER ☐ ↓	SINGLE, DIVORCED SEPARATED, WIDOWED ☐ →	514
512	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	
513A	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	
513B	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	
514	What do you think about legislation of abortion ? Do you approve or not approve?	APPROVE 1 → DISAPPROVE 2 DON'T KNOW 8 →	516 516
515	If not, why do you disapprove?	NOT HEALTHY FOR MOTHER 1 REDUCES POPULATION GROWTH 2 RELIGIOUS REASON 3 REDUCES USE OF CONTRACEPTIVE 4 IMPROVED UNSAFETY SEXUAL RELATIONSHIP 5 OTHER 6 (SPECIFY) DON'T KNOW 8	
516	Are there at least one of posters, newspapers, and magazines about RH, Contraceptives and any other family planning method at your home?	REPRODUCTIVE HEALTH A FAMILY PLANNING B CONTRACEPTIVE C OTHER X (SPECIFY) NONE Z	

SECTION 6. HUSBAND'S BACKGROUND AND WOMAN'S WORK

No.	Questions and Filters	Coding Categories	Skip to
600	**CHECK Q:112** CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ SEPARATED/ DIVORCED ☐ →		602
	WIDOWED/ NEVER MARRIED ☐ →		606
601A	Does your husband/partner live at home or live away from home at the moment? If no: How long has he lived live away from the home?	YES 1 LESS THAN 1 MONTH 2 1- 6 MONTHS 3 MORE THAN 6 MONTHS 4	
601B	How old is your husband/partner? (AGE IN COMPLETED YEARS)	AGE ☐☐	
602	Did your (last) husband/partner ever attend school?	YES 1 NO 2 →	604A
603	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	
604A	Has your husband/partner done any work in the last 12 months?	YES 1 NO 2 →	605
604B	What is/was your husband/partner's usual occupation? That is, what kind of work does/did he mainly do?	DESCRIBE: ☐☐☐	
	Now I would like to ask about you?		
605	Apart from your housework, are you currently being employed and working?	YES 1 → NO 2	608A
606	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	608A
607	Have you done any work in the last 12 months?	YES 1 NO 2 →	616
608A	What is your occupation, that is, what kind of work do you mainly do ?	DESCRIBE: ☐☐☐	

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No.	Questions and Filters	Coding Categories	Skip to
608B	In which sector of the economy do you work?	SELF EMPLOYMENT 1 PUBLIC SECTOR 2 PRIVATE SECTOR 3 NON-GOVERNMENTAL ORGANIZATION 4	
609	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR 1 → 611 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3 → 612	
610	During the last 12 months, how many months did you work?	NUMBER OF MONTHS ☐☐	
611	During the last 12 months, how many days a week did you usually work (in the months that you worked)?	NUMBER OF DAYS ☐ → 613	
612	During the last 12 months, approximately how many days did you work?	NUMBER OF DAYS ☐☐☐	
613	Do you earn cash for your work? (PROBE: Do you make money for working?)	YES 1 NO 2 → 616	
614	As a result of your job, you receive salary. Do you think it is a suitable amount or not?	SUITABLE 1 NOT SUITABLE 2	
615	**CHECK Q: 600** 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	
616	Do you smoke cigarettes ?	DO SMOKE 1 DO NOT SMOKE 2 → 700	
617	At what age did you start smoking ?	AGE ☐☐	

SECTION 7. AIDS AND STD

No.	Questions and Filters	Coding Categories	Skip to
	Now I would like to talk to you about STD/STI?		
700	Have you ever heard of STD/STI?	YES 1 NO 2 →	707
701	From which sources of information have you learned most about STD/STI ? 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)**	
702	What do you think how one could be infected by STD?	SEXUAL INTERCOURSE 1 SYRINGE AND MEDICAL TOOLS 2 WHEN KISSED WITH SOMEONE 3 DOMESTIC/HOUSEHOLD ITEMS 4 OTHER 5 **(SPECIFY)** DO NOT KNOW 8	
703A	Do know any symptoms and signs of STD?	YES 1 NO 2 →	704
703B	If yes, could you tell me any symptoms and signs you know. Any other signs and symptoms? RECORD ALL MENTIONED.	ABDOMINAL PAIN A GENITAL DISCHARGE B BURNING PAIN ON URINATION C REDNESS IN GENITAL AREA D IRRITATING IN GENITAL AREA E SWELLING IN GEN ITAL AREA F GENITAL SORES/ULCERS G GENITAL WARTS H BLOOD IN URINE I LOSS OF WEIGHT J SKIN INFECTION K HARD TO GET TO PREGNANT L IMPOTENCE M OTHER X **(SPECIFY)** NO SYMPTOMS Z	
704	Is there anything a person can do to avoid getting STD?	YES 1 NO 2 DO NOT KNOW 8 →	706
705	What do you think what someone can do to avoid getting STD? Aside from these symptoms do you know any source to avoid getting STD? 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 USE ONLY DISPOSABLE INJECTION SYRINGE G AVOID KISSING H AVOID MOSQUITO BITES I SEEK PROTECTION FROM TRADITIONAL HEALER J OTHER X **(SPECIFY)** DON'T KNOW Z	

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No.	Questions and Filters	Coding Categories	Skip to
706	From whom one should seek assistance when he/she infected by STD?	HEALTH WORKERS 1 HUSBAND/PARTNER 2 PARENTS 3 FRIENDS 4 SEXUAL PARTNER 5 OTHER 6 (SPECIFY) DO NOT KNOW 8	
707	**Now I would like to talk to you about AIDS.** Have you ever heard of an illness called AIDS ?	YES 1 NO 2 →	717
708	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)	
709	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 →	711
710	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 USE ONLY DISPOSABLE INJECTION SYRINGE G AVOID KISSING H AVOID MOSQUITO BITES I SEEK PROTECTION FROM TRADITIONAL HEALER J OTHER X (SPECIFY) DON'T KNOW Z	
711	Is it possible for a healthy-looking person to have the AIDS virus ?	YES 1 NO 2 DON'T KNOW 8	
712	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	
713	What do you think how you should treat one infected by AIDS?	THE SAME AS BEFORE 1 TRY NOT TO BE INFECTED BY AIDS 2 TRY TO UNDERSTAND AND HELP 3 ISOLATE FROM COMMUNITY 4 DON'T KNOW 8	
714	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	

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No.	Questions and Filters	Coding Categories	Skip to
715A	Have you had any injection within last 3 months?	YES 1 NO 2 →	716
715B	If yes, how many times you had injections?	ONCE 1 TWICE 2 3 TIMES AND MORE 3	
715C	What kind of injection did you had?	ANTIBIOTICS 1 VITAMIN 2 IV (INTRAVENOUS) 3 OTHER 4 (SPECIFY)	
716	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	722
717	**Check: 600** Married Living together Never married Divorced Widowed Separated		720 719
718	Now I would like to ask you about your 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 9 96 →	721 722 722
719	Now I would like to ask you about your sexual activity. Have you ever had sexual relation?	HAD SEXUAL RELATION 1 NEVER HAD SEXUAL RELATION 2 DON'T REMEMBER 8 →	723
720	Did you have sexual relation for last month?	YES 1 NO 2 →	722
721	Did you use a condom to avoid getting AIDS and STD when you had last sexual intercourse?	YES 1 NO (had sexual intercourse with husband/partner) 2 NO 3 DON'T REMEMBER 4	
722	At what age did you first have sexual relations?	AGE	
723	**RECORD THE TIME**	**HOUR** **MINUTES**	

APPROVED BY NATIONAL STATISTICAL OFFICE OF MONGOLIA **N.o .85 .** RHS-2

MONGOLIAN REPRODUCTIVE HEALTH SURVEY 2003

HUSBAND'S QUESTIONNAIRE

CLUSTER NUMBER ☐☐☐

AIMAG ☐☐

SOUM ☐☐

BAGH ☐☐

HOUSEHOLD NUMBER ☐☐

AREA* ☐

NAME AND LINE NUMBER OF MAN ☐☐

NAME AND LINE NUMBER OF WIFE **YES=1 NO=2** ☐

*** AREA CODES :**

1. ULAANBAATAR **2. AIMAG CENTER** **3. SOUM 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 ?	YEAR 19☐☐ DON'T KNOW 98 MONTH ☐☐ 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 soum, or in the countryside?	CITY 1 AIMAG CENTER 2 SOUM 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	Are you literate?	LITERATE 1 ILLITERATE 2 →	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	
109	Do you usually go to doctor to get medical check-up to prevent from any kind of disease?	ONCE A QUARTER 1 ONCE A YEAR 2 ONCE A 2-YEAR PERIOD 3 NONE 4 WHEN SICK 5	
110	What is your religion ?	ATHEIST 1 BUDDHIST 2 MUSLIM 3 PROTESTANT/CHRISTIAN 4 OTHER 5 **(SPECIFY)**	
111	Have you done any work in the last 12 months?	YES 1 NO 2 →	114

No.	Questions and Filters	Coding Categories	Skip to
112	What is your occupation, that is, what kind of work do you mainly do ?	DESCRIBE: _____ _____ _____ ☐☐☐	
113	In which sector of the economy do you work?	SELF EMPLOYMENT 1 PUBLIC SECTOR 2 PRIVATE SECTOR 3 NON-GOVERNMENTAL ORGANIZATION 4	
114	Do you smoke cigarettes ? IF YES : About how many cigarettes do you smoke a day?	SMOKE 1 DO NOT SMOKE 2 →	200
115	At what age did you start smoking ?	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.**

CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 302, 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 301 OR 302,

301 Which ways or methods have you heard about ?	SPONTANEOUS Yes	**302** Have you ever heard of METHOD? Yes No	**302A** From whom did you learn of (METHOD) first time?	**302B** From whom you can get (METHOD)?	**303A** Did you ever use (METHOD)?	**303B** Main difficulties/problems ,if any, in getting or using (METHOD)?
O1 **PILL** "Women can take a pill every day"		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O2 **IUD** "Women can have a loop or coil placed inside them by a doctor or nurse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
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	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O4 **NORPLANT/IMPLANT** "Women can get 6 rods under the skin in the upper arm to prevent pregnancy"		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O5 **DIAPHRAGM/FOAM/JELLY** "Women can place a tissue or a diaphragm or cream in the vagina before intercourse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O6 **MALE CONDOM** "Men can use a rubber sheath sexual intercourse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O7 **FEMALE CONDOM** "Women can use a rubber sheath during sexual intercourse".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O8 **FEMALE STERILIZATION** "Women can have an operation to avoid having any more children".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
O9 **MALE STERILIZATION** "Men can have an operation to avoid having any more children".		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐
1O **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	Other ☐☐		YES 1 NO 2	Other ☐☐
11 **WITHDRAWAL** "Men can be careful and pull out before climax".		1 2 3	Other ☐☐		YES 1 NO 2	Other ☐☐
12 Have you heard of any other ways or methods that women or men use to avoid pregnancy ?		1 2 3	Other ☐☐	Other ☐☐	YES 1 NO 2	Other ☐☐

Coding categories 302A		Coding categories 302B		Coding categories 303B	
MEDICAL WORKERS	01	PUBLIC HOSPITAL	01	NONE	01
WIFE/PARTNER	02	PRIVATE HOSPITAL	02	WIFE DISAPPROVES	02
FRIENDS	03	PHARMACY	03	LACK OF ACCESSIBILITY/TOO FAR	03
PARENTS/RELATIVES	04	FAMILY DOCTOR	04	COST TOO MUCH	04
FAMILY DOCTOR	05	BAGH FELDSHER	05	INCONVENIENT TO USE	05
BAGH FELDSHER	06	SHOP	06	HEALTH CONCERNS	06
TV, NEWSPAPER, RADIO	07	FRIENDS	07	SIDE EFFECTS	07
TRAINING, LESSON	08	PARENTS/RELATIVES	08		
ADVERTISING MATERIAL	09	RESEARCHERS	09		
RESEARCHERS	10	OTHER	10	OTHER	96
OTHER	96	(SPECIFY)		(SPECIFY)	
(SPECIFY)		DON'T KNOW	98	DON'T KNOW	98

No.	Questions and Filters	Coding Categories	Skip to
304B	Are you and your wife/partner using any method to avoid or delay getting her pregnant?	YES 1 NO 2 DON'T KNOW 8	310
304C	What contraceptives had you and your wife/partner used to avoid or delay getting her pregnant? Check Q.303A, 304A. (Ask Q.302 if needed.)		
305	Which method are you using?	PILL O1 IUD O2 INJECTIONS O3 IMPLANTS/NORPLANT O4 DIAPHRAGM /FOAM/JELLY O5 MALE CONDOM O6 FEMALE CONDOM O7 FEMALE STERILIZATION O8 MALE STERILIZATION O9 PERIODIC ABSTINENCE 1O WITHDRAWAL 11 OTHER 96 (SPECIFY)	308
306	Is there service fee or purchase cost to obtain the method? IF ANY: How much does it cost (for one time)? MNT=Tugrick	PURCHASE 1 SERVICE FEE 2 NO FEE 3 MNT ☐☐☐☐☐☐	
307	From whom do you get it?	PUBLIC HOSPITAL 01 PRIVATE HOSPITAL 02 PHARMACY 03 FAMILY DOCTOR 04 BAGH FELDSHER 05 SHOP 06 FRIENDS 07 PARENTS/RELATIVES 08 RESEARCHER 09 OTHER 96 (SPECIFY)	
308	Do you have any problem with the method you are using now?	YES 1 NO 2 →	311

No.	Questions and Filters	Coding Categories	Skip to
309	What is the main problem?	WIFE DISAPPROVES 01 LACK OF ACCESSIBILITY/TOO FAR 02 COST TOO MUCH 03 INCONVENIENT TO USE 04 HEALTH CONCERNS 05 SIDE EFFECTS 06 OTHER 96 (SPECIFY) DON'T KNOW 98	311
310	What is the main reason you do not intend to use a method?	**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	
311	Will you use one of the methods in the following 12 months?	YES 1 NO 2 DON'T KNOW 8	313
312	Do you intend to use one of the methods in the future?	YES 1 NO 2 DON'T KNOW 8	314

No.	Questions and Filters	Coding Categories	Skip to
313	Which method you would like to use?	PILL O1 IUD O2 INJECTIONS O3 IMPLANTS/NORPLANT O4 DIAPHRAGM /FOAM/JELLY O5 MALE CONDOM O6 FEMALE CONDOM O7 FEMALE STERILIZATION O8 MALE STERILIZATION O9 PERIODIC ABSTINENCE 1O WITHDRAWAL 11 OTHER 96 **(SPECIFY)**	
314	**CHECK: Q 201** 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 ☐☐ IF NO, RECORD THE REASON	
315	Do you approve or disapprove of couples using a method to avoid pregnancy?	APPROVE 1 DISAPPROVE 2 DON'T KNOW 8	
316	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	
317	In the last month have you discussed family planning with your friends, neighbors, or relatives?	YES 1 NO 2 →	319
318	With whom did you discuss ? With anyone else?	HUSBAND/PARTNER A PARENT B SISTERS/BROTHERS C DAUGHTER D MOTHER - IN - LAW E FRIENDS F OTHER X **(SPECIFY)**	
319	Now I would like to ask your wife's/partner's attitude about family planning. Do you think your wife/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES 1 DISAPPROVES 2 DON'T KNOW 8	

No.	Questions and Filters	Coding Categories	Skip to
320	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	
321	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	
322	**CHECK: Q,301A AND Q, 302A** KNOWS ABOUT FEMALE STERILIZATION	DOES NOT KNOW ABOUT FEMALE STERILIZATION →	325
323	Do you approve of a woman having a sterilization operation, or do you disapprove, or doesn't it matter to you?	APPROVE 1 → 325 DISAPPROVE 2 DOESN'T MATTER 3 → 325	
324	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	
325	**CHECK: Q,301A AND Q, 302A** KNOWS ABOUT MALE STERILIZATION	DOES NOT KNOW ABOUT MALE STERILIZATION →	328
326	Do you approve of a man having a vasectomy, or do you disapprove, or doesn't it matter to you?	APPROVE 1 → 328 DISAPPROVE 2 DOESN'T MATTER 3 → 328	
327	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	
328	What do you think about the legislation of abortion? Do you approve or not approve?	APPROVE 1 → 330 DISAPPROVE 2 DON'T KNOW 8 → 330	

No.	Questions and Filters	Coding Categories	Skip to
329	If not, why do you disapprove?	NOT HEALTHY FOR MOTHER 1 REDUCES POPULATION GROWTH 2 RELIGIOUS REASON 3 REDUCES USE OF CONTRACEPTIVE 4 IMPROVED UNSAFETY SEXUAL RELATIONSHIP 5 OTHER 6 **(SPECIFY)** DON'T KNOW 8	
330	Is there at least one of posters, newspapers, and magazines about RH, Contraceptives and any other family planning methods in your home? RH-Reproductive health	RH A FAMILY PLANNING B CONTRACEPTIVE C OTHER X **(SPECIFY)** NONE Z	

SECTION 4. AIDS AND STD

No.	Questions and Filters	Coding Categories	Skip to
	Now I would like to talk to you about STD/STI?		
400	Have you ever heard of STD?	YES 1 NO 2	407
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	What do you think how one could be infected by STI/STD?	SEXUAL INTERCOURSE 1 SYRINGE AND MEDICAL TOOLS 2 WHEN KISSED WITH SOMEONE 3 DOMESTIC/HOUSEHOLD ITEMS 4 OTHER 5 **(SPECIFY)** DON'T KNOW 8	
403A	Do you know any symptoms and signs of STD?	YES 1 NO 2	404
403B	Please tell me any symptoms and signs you know. Any other symptoms and signs? RECORD ALL MENTIONED.	ABDOMINAL PAIN A GENITAL DISCHARGE B BURNING PAIN ON URINATION C REDNESS IN GENITAL AREA D IRRITATING IN GENITAL AREA E SWELLING IN GEN ITAL AREA F GENITAL SORES/ULCERS G GENITAL WARTS H BLOOD IN URINE I LOSS OF WEIGHT J SKIN INFECTION K INFERTILITY L IMPOTENCE M OTHER X **(SPECIFY)** NO SYMPTOMS Z	
404	Is there anything a person can do to avoid getting STD?	YES 1 NO 2 DON'T KNOW 8	406
405	What do you think what someone can do to avoid getting STD? Aside from these symptoms do you know any source to avoid getting STD? 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 USE ONLY DISPOSABLE INJECTION SYRINGE G AVOID KISSING H AVOID MOSQUITO BITES I SEEK PROTECTION FROM TRADITIONAL HEALER J OTHER X **(SPECIFY)** DON'T KNOW Z	

No.	Questions and Filters	Coding Categories	Skip to
406	From whom one should seek assistance when he/she infected by STD?	HEALTH WORKERS 1 HUSBAND/PARTNER 2 PARENTS 3 FRIENDS 4 SEXUAL PARTNER 5 OTHER 6 (SPECIFY) DO NOT KNOW 8	
	Now I would like to talk to you about AIDS.		
407	Have you ever heard of an illness called AIDS ?	YES 1 NO 2 →	417
408	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)	
409	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 →	411
410	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 USE ONLY DISPOSABLE INJECTION SYRINGE G AVOID KISSING H AVOID MOSQUITO BITES I SEEK PROTECTION FROM TRADITIONAL HEALER J OTHER X (SPECIFY) DON'T KNOW Z	
411	Is it possible for a healthy-looking person to have the AIDS virus ?	YES 1 NO 2 DON'T KNOW 8	
412	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	
413	What do you think how you should treat to one infected by AIDS?	THE SAME AS BEFORE 1 TRY NOT TO BE INFECTED BY AIDS 2 TRY TO UNDERSTAND AND HELP 3 ISOLATE FROM COMMUNITY 4 DON'T KNOW 8	

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No.	Questions and Filters	Coding Categories	Skip to
414	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	
415A	Have you had any injection within last 3 months?	YES 1 NO 2 →	416
415B	If yes, how many times you had injections?	ONCE 1 TWICE 2 3 TIMES AND MORE 3	
415C	What kind of injection did you have?	ANTIBIOTICS 1 VITAMIN 2 IV (INTRAVENOUS) 3 OTHER 4 **(SPECIFY)**	
416	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	
417	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 → ☐☐	419
418	Did you use a condom to avoid getting AIDS and STD when you had last sexual relation?	YES 1 NO (had sexual relation with husband/partner) 2 NO 3 DON'T REMEMBER 4	
419	**RECORD THE TIME**	**HOUR** ☐☐ **MINUTES** ☐☐	