

# Philippines

## National Demographic and Health Survey 1998



National Statistics Office



Department of Health



Demographic and Health Surveys  
Macro International Inc.

**REPUBLIC OF THE PHILIPPINES**

**National Demographic and  
Health Survey  
1998**

National Statistics Office  
Manila, Philippines

Department of Health  
Manila, Philippines

Macro International Inc.  
Calverton, Maryland

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This report summarizes the findings of the 1998 National Demographic and Health Survey (NDHS) undertaken by the National Statistics Office in collaboration with the Department of Health (DOH), the University of the Philippines Population Institute, and other concerned agencies in the Philippine government. Funding for the 1998 NDHS was provided by the U.S. Agency for International Development and the DOH.

The 1998 NDHS is part of the worldwide Demographic and Health Surveys (DHS) program, which is designed to collect, analyze, and disseminate demographic data on fertility, family planning, and maternal and child health. Additional information on the 1998 NDHS may be obtained from the National Statistics Office, Solicarel Building, Ramon Magsaysay Boulevard, Santa Mesa, Manila, Philippines. Additional information about the DHS program may be obtained by writing to: Macro International Inc., 11785 Beltsville Drive, Calverton, MD 20705-3119, USA (Telephone 301-572-0200, Fax 301-572-0999).

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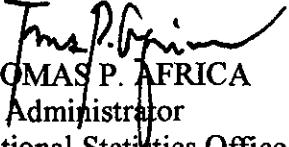
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## PREFACE

The National Statistics Office (NSO) is pleased to present this final report on the 1998 National Demographic and Health Survey (NDHS). The survey is the seventh in a series of surveys conducted every five years since 1968 to measure trends in demographic and family planning indicators. It was implemented by the NSO in collaboration with the Department of Health. Fieldwork for the NDHS took place from early March to early May and covered a sample of over 12,000 households and 14,000 women of childbearing age.

The successful completion of the 1998 NDHS was made possible by the joint efforts of a number of organizations and individuals whose participation I would like to acknowledge with gratitude. First is the U.S. Agency for International Development (USAID)/Philippines which initiated planning for the survey and provided substantial financial assistance for the implementation of the sampling and data collection. The Department of Health (DOH), University of the Philippines Population Institute, Commission on Population and Food and Nutrition Research Institute collaborated on all stages of the survey, assisting in the design, field staff training, and fieldwork. DOH also provided financial assistance and participated in the analysis and production of this report. We would also like to thank the Demographic and Health Surveys program of Macro International Inc. in Maryland U.S.A. for providing technical assistance in all phases of the project. As part of its ongoing assistance to NSO in the design and implementation of a new master sample, the U.S. Bureau of the Census provided invaluable assistance in the design and selection of the NDHS sub-sample. The survey would not have gotten off the ground without the exemplary, untiring efforts of the staff at the Household Statistics Department and at the NSO regional and provincial offices. They spent many long days, nights and weekends of overtime work to make this survey a success. Finally we are ever mindful of the generosity of our respondents in contributing their time and information to enable us to gather crucial data for our country's future planning.



TOMAS P. AFRICA  
Administrator  
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Manila, Philippines  
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## PREFACE

The Department of Health is proud to have been involved in the implementation of the 1998 National Demographic and Health Survey. The survey has provided much needed information that will be used in evaluating DOH programs and in planning future directions. In fact, there are few survey findings that do not have direct relevance to DOH programs. Data from the households interviewed concerning source of drinking water, type of toilet facility, and use of iodized salt are basic indicators of the home health environment. Data collected from individual women such as levels of contraceptive use, fertility and child mortality rates, and the extent of coverage of various reproductive health services will be used to assess progress in the relevant DOH programs. Regional-level indicators will point to the areas where more concentrated efforts are needed. Finally, the special health module that was added to the survey at the request of the DOH provides results of particular interest to DOH concerning health facility utilization, knowledge of the causes of various diseases, knowledge and use of traditional medicines, and health insurance coverage.

I would like to thank the National Statistics Office for taking the lead in implementing the 1998 NDHS. I heartily support such collaborative efforts between government agencies because they result in a better product at lower cost. Perhaps more importantly, collaboration encourages a wider sense of ownership of the data and ensures its broader use. I hope that the future will hold more examples of such fruitful joint efforts.



ALBERTO G. ROMUALDEZ JR., M.D.  
Secretary  
Department of Health

Manila, Philippines  
January 1999



## SUMMARY OF FINDINGS

The 1998 Philippines National Demographic and Health Survey (NDHS), is a nationally-representative survey of 13,983 women age 15-49. The NDHS was designed to provide information on levels and trends of fertility, family planning knowledge and use, infant and child mortality, and maternal and child health. It was implemented by the National Statistics Office in collaboration with the Department of Health (DOH). Macro International Inc. of Calverton, Maryland provided technical assistance to the project, while financial assistance was provided by the U.S. Agency for International Development (USAID) and the DOH. Fieldwork for the NDHS took place from early March to early May 1998.

Survey data generally confirm patterns observed in the 1993 National Demographic Survey (NDS), showing increasing contraceptive use and declining fertility.

### FERTILITY

**Fertility Decline.** The NDHS data indicate that fertility continues to decline gradually but steadily. At current levels, women will give birth an average of 3.7 children per woman during their reproductive years, a decline from the level of 4.1 recorded in the 1993 NDS. A total fertility rate of 3.7, however, is still considerably higher than the rates prevailing in neighboring Southeast Asian countries.

**Fertility Differentials.** Survey data show that the large differential between urban and rural fertility levels is widening even further. While the total fertility rate in urban areas declined by about 15 percent over the last five years (from 3.5 to 3.0), the rate among rural women barely declined at all (from 4.8 to 4.7). Consequently, rural women give birth to almost two children more than urban women.

Significant differences in fertility levels by region still exist. For example, fertility is more than twice as high in Eastern Visayas and Bicol Regions (with total fertility rates well over 5 births per woman) than in Metro Manila (with a rate of 2.5 births per woman).

Fertility levels are closely related to women's education. Women with no formal education give birth to an average of 5.0 children in their lifetime, compared to 2.9 for women with at least some college education. Women with either elementary or high school education have intermediate fertility rates.

**Family Size Norms.** One reason that fertility has not fallen more rapidly is that women in the Philippines still want moderately large families. Only one-third of women say they would ideally like to have one or two children, while another third state a desire for three children. The remaining third say they would choose four or more children. Overall, the mean ideal family size among all women is 3.2 children, identical to the mean found in 1993.

**Unplanned Fertility.** Another reason for the relatively high fertility level is that unplanned pregnancies are still common in the Philippines. Overall, 45 percent of births in the five years prior to the survey were reported to be unplanned; 27 percent were mistimed (wanted later) and 18 percent were unwanted. If unwanted births could be eliminated altogether, the total fertility rate in the Philippines would be 2.7 births per woman instead of the actual level of 3.7.

**Age at First Birth.** Fertility rates would be even higher if Filipino women did not have a pattern of late childbearing. The median age at first birth is 23 years in the Philippines, considerably higher than in most other countries. Another factor that holds down the overall level of fertility is the fact that about 9 or 10 percent of women never give birth, higher than the level of 3-4 percent found in most developing countries.

## FAMILY PLANNING

**Increasing Use of Contraception.** A major cause of declining fertility in the Philippines has been the gradual but fairly steady increase in contraceptive use over the last three decades. The contraceptive prevalence rate has tripled since 1968, from 15 to 47 percent of married women. Although contraceptive use has increased since the 1993 NDS (from 40 to 47 percent of married women), comparison with the series of nationally representative Family Planning Surveys indicates that there has been a levelling-off in family planning use in recent years.

**Method Mix.** Use of traditional methods of family planning has always accounted for a relatively high proportion of overall use in the Philippines, and data from the 1998 NDHS show the proportion holding steady at about 40 percent. The dominant changes in the "method mix" since 1993 have been an increase in use of injectables and traditional methods such as calendar rhythm and withdrawal and a decline in the proportions using female sterilization. Despite the decline in the latter, female sterilization still is the most widely used method, followed by the pill.

**Differentials in Family Planning Use.** Differentials in current use of family planning in the 16 administrative regions of the country are large, ranging from 16 percent of married women in ARMM to 55 percent of those in Southern Mindanao and Central Luzon. Contraceptive use varies considerably by education of women. Only 15 percent of married women with no formal education are using a method, compared to half of those with some secondary school. The urban-rural gap in contraceptive use is moderate (51 vs. 42 percent, respectively).

**Knowledge of Contraception.** Knowledge of contraceptive methods and supply sources has been almost universal in the Philippines for some time and the NDHS results indicate that 99 percent of currently married women age 15-49 have heard of at least one method of family planning. More than 9 in 10 married women know the pill, IUD, condom, and female sterilization, while about 8 in 10 have heard of injectables, male sterilization, rhythm, and withdrawal. Knowledge of injectables has increased far more than any other method, from 54 percent of married women in 1993 to 89 percent in 1998.

**Unmet Need for Family Planning.** Unmet need for family planning services has declined since 1993. Data from the 1993 NDS show that 26 percent of currently married women were in need of services, compared with 20 percent in the 1998 NDHS. A little under half of the unmet need is comprised of women who want to space their next birth, while just over half is for women who do not want any more children (limiters). If all women who say they want to space or limit their children were to use methods, the contraceptive prevalence rate could be increased from 47 percent to 70 percent of married women. Currently, about three-quarters of this "total demand" for family planning is being met.

**Discontinuation Rates.** One challenge for the family planning program is to reduce the high levels of contraceptive discontinuation. NDHS data indicate that about 40 percent of contraceptive users in the Philippines stop using within 12 months of starting, almost one-third of whom stop because of an unwanted pregnancy (i.e., contraceptive failure). Discontinuation rates vary by method. Not surprisingly, the rates for the condom (60 percent), withdrawal (46 percent), and the pill (44 percent) are considerably higher than for the IUD (14 percent). However, discontinuation rates for injectables are relatively high, considering that one dose is usually effective for three months. Fifty-two percent of injection users discontinue within one year of starting, a rate that is higher than for the pill.

## MATERNAL AND CHILD HEALTH

**Childhood Mortality.** Survey results show that although the infant mortality rate remains unchanged, overall mortality of children under five has declined somewhat in recent years. Under-five mortality declined from 54 deaths per 1,000 births in 1988-92 to 48 for the period 1993-97. The infant mortality rate remained stable at about 35 per 1,000 births.

**Childhood Vaccination Coverage.** The 1998 NDHS results show that 73 percent of children 12-23 months are fully vaccinated by the date of the interview, almost identical to the level of 72 percent recorded in the 1993 NDS. When the data are restricted to vaccines received before the child's first birthday, however, only 65 percent of children age 12-23 months can be considered to be fully vaccinated.

**Childhood Health.** The NDHS provides some data on childhood illness and treatment. Approximately one in four children under age five had a fever and 13 percent had respiratory illness in the two weeks before the survey. Of these, 58 percent were taken to a health facility for treatment. Seven percent of children under five were reported to have had diarrhea in the two weeks preceding the survey. The fact that four-fifths of children with diarrhea received some type of oral rehydration therapy (fluid made from an ORS packet, recommended homemade fluid, or increased fluids) is encouraging.

**Breastfeeding Practices.** Almost all Filipino babies (88 percent) are breastfed for some time, with a median duration of breastfeeding of 13 months. Although breastfeeding has beneficial effects on both the child and the mother, NDHS data indicate that supplementation of breastfeeding with other liquids and foods occurs too early in the Philippines. For example, among newborns less than two months of age, 19 percent were already receiving supplemental foods or liquids other than water.

**Maternal Health Care.** NDHS data point to several areas regarding maternal health care in which improvements could be made. Although most Filipino mothers (86 percent) receive prenatal care from a doctor, nurse, or midwife, tetanus toxoid coverage is far from universal and has been declining somewhat. The proportion of recent births for which the mother reported receiving two or more tetanus toxoid vaccinations during pregnancy declined from 42 in 1993 to 38 percent. Moreover, two-thirds of births in the Philippines are delivered at home; consequently only 56 percent receive assistance at delivery from a doctor, nurse, or midwife and 41 percent are assisted by traditional birth attendants. Proper medical attention during pregnancy and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for either the mother or the newborn. Somewhat more encouraging is the fact that for 75 percent of recent births, mothers reported having received iron tablets during pregnancy and in 57 percent of cases, they received iodine tablets during pregnancy. Maternal mortality has remained low at approximately 200 maternal deaths per 100,000 live births.

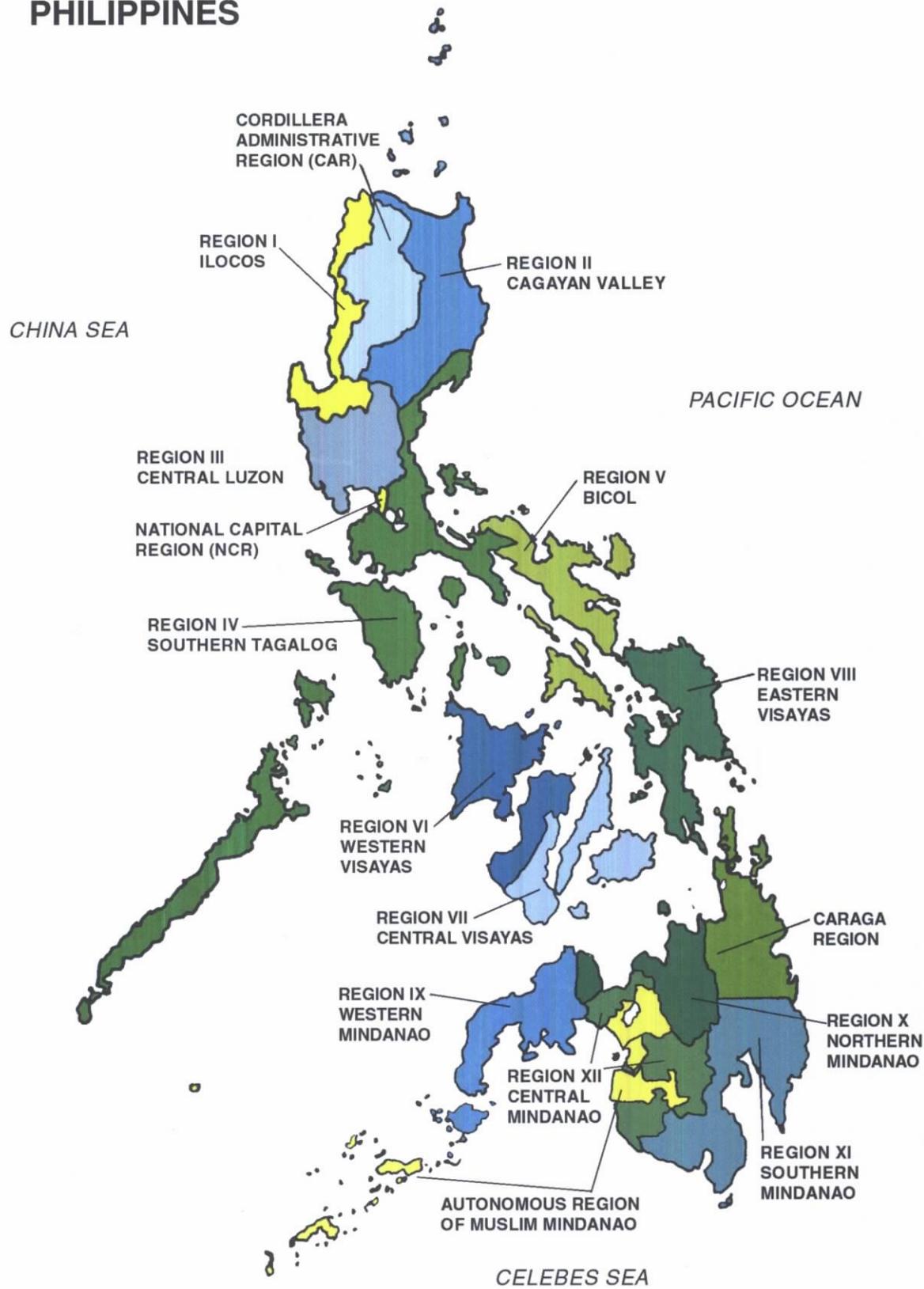
## **HOUSEHOLD HEALTH ISSUES**

**Health Care Financing.** NDHS data indicate that in 40 percent of households, at least one member of the household belongs to a health care financing scheme or an insurance plan. Over 90 percent of such households belong to Medicare.

**Knowledge of Herbal Medicines.** The Department of Health has endorsed 10 herbal medicines as being scientifically proven effective for treatment of specific illnesses and conditions. NDHS data show that although awareness of some of these herbs is widespread, knowledge about the specific uses of the herbs is quite limited. For example, although 81 percent of household respondents recognized *ampalaya*, only one in 20 know that it is useful in treating diabetes and only 6 percent of the 75 percent of respondents who are familiar with *sambong* correctly said that it is used as a diuretic. However, knowledge of *bayabas* is high; 97 percent of household respondents had heard of it and 81 percent know that it is used to clean wounds.

**Knowledge of Healthy Lifestyle.** NDHS data indicate quite high general awareness regarding health issues. For example, most household respondents say that they watch their nutrition or exercise to stay healthy. Similarly, a majority of household respondents are aware that smoking causes lung diseases such as cancer. Over 90 percent of respondents have heard of dengue fever and two-thirds of them say that dengue can be prevented by destroying the breeding sites of mosquitos. However, misconceptions about leprosy and tuberculosis abound, with 21 percent of respondents knowing that leprosy is transmitted by skin and 11 percent by airborne droplets, and only one in six respondents knowing that tuberculosis is caused by a germ or bacteria.

# PHILIPPINES





# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Background**

Demographic surveys are the primary source of data used in monitoring the progress and evaluating the impact of the population program of the country. The Philippine Population Program was officially launched in 1970. Since then, it has undergone many changes in its policy and program directions. In the beginning, the program was centered on fertility reduction and contraceptive distribution, using a clinic-based approach. In the 1970s, the family planning program shifted to a family welfare approach, adopting a combined clinic and community-based delivery approach. In the 1980s, the population policy was re-stated, calling for the broadening of population concerns beyond fertility reduction to cover family formation, the status of women, maternal and child health, morbidity and mortality, population distribution and urbanization, internal and international migration and population structure (POPCOM, 1997: p.1). The Philippine Population Management Program (PPMP) was developed in 1993 to supplant the Philippine Population Program (PNGOC, 1998: p 25.).

The PPMP adopts the population, resources and environment (PRE) framework which defines the connection between population and sustainable development. Its overall goal is the improvement of quality of life by creating a favorable environment for achieving rational growth and distribution of population, defined in relation to resources and environment. In the years 1998 to 2003, the program aims at promoting the reproductive health approach in the implementation of population policies and programs. Specifically, the Philippine Family Planning Program (PFPP) will promote family planning within a comprehensive package of reproductive health services (POPCOM, 1997: p.17). The action agenda includes:

- 1) reducing unmet need for family planning services,
- 2) reducing incidence of high-risk pregnancies,
- 3) making available high-quality family planning services,
- 4) reducing abortion, and
- 5) increasing the participation and sharing of responsibility of men in the practice of family planning (POPCOM, 1997: p.19).

The Department of Health (DOH) is the lead agency for the reproductive health and family planning component of the PPMP. The Commission on Population (POPCOM) is the coordinating body of the PPMP (POPCOM, 1997: p. 5-6).

The 1998 National Demographic and Health Survey (NDHS) is the seventh in a series of demographic surveys taken at five-year intervals since 1968. It is a nationwide sample survey designed to collect information on fertility, family planning, and health in the Philippines. The 1998 NDHS was undertaken as part of the worldwide Demographic and Health Survey (DHS) program. It was conducted by the National Statistics Office (NSO), in collaboration with the Department of Health (DOH).

Macro International, Inc., which is based in Calverton, Maryland (USA), provided technical assistance to the project. The University of the Philippine Population Institute (UPPI), The Population Commission (POPCOM), the Food and Nutrition Research Institute (FNRI) and the DOH also provided technical inputs during the preparatory phase of the survey. Financial assistance was provided by the U.S. Agency for International Development (USAID) and the DOH.

This report presents the findings from the 1998 NDHS regarding the principal topics covered in the survey, namely, fertility, family planning, infant and child mortality, infant feeding practices, maternal and child health, as well as general health. The NDHS data can be useful inputs for the implementation of some major program tasks of the government under the Philippine Population Management Program (PPMP). These data can be utilized for research activities aimed at improving program strategies. Together with data from previous demographic surveys, the survey can serve as an instrument to monitor the progress and evaluate the impact of the PPMP.

## **1.2 Objectives of the Survey**

The primary objective of the NDHS is to provide up-to-date information on fertility levels; determinants of fertility; fertility preferences; infant and childhood mortality levels; awareness, approval, and use of family planning methods; breastfeeding practices; and maternal and child health. This information is intended to assist policy makers and program managers in evaluating and designing programs and strategies for improving health and family planning services in the country.

## **1.3 Sample Design**

The 1998 NDHS aims at providing estimates for each of the sixteen regions of the country with an acceptable precision for socio-demographic characteristics like fertility, family planning use, and health and mortality indicators. The NDHS sample design consisted of selecting some 12,500 households in 755 enumeration areas (EAs) which was expected to produce completed interviews with approximately 15,000 women age 15-49. The sample was first allocated to each of the regions. Within each region, a self-weighting sampling scheme was adopted; however, due to the non-proportional allocation of the sample to the regions, the NDHS sample is not self-weighting at the national level and weighting factors have been applied to the data.

The 1998 NDHS sample is a sub-sample of the new master sample of the Integrated Survey of Households (ISH) of the NSO. The expanded sample of ISH consists of 3,416 enumeration areas selected from the 1995 census frame with a sophisticated design that allows for regional estimates with periodic rotation of panels. The ISH expanded sample was drawn by first, selecting barangays systematically with probability proportional to size. In barangays that consist of more than one EA, a subsequent step consisted of selecting the sample EA systematically with probability proportional to size. Because the primary sampling units in the ISH were selected with probability proportional to size, the EAs for the NDHS were sub-selected from the ISH with equal probability to make the NDHS selection equivalent to selection with probability proportional to size. A total of 755 primary sampling units were utilized for the NDHS. Fieldwork in three sample EA was not possible, so a total of 752 EAs were covered.

The list of households based on the household listing operation conducted in all the NDHS sample points in November 1997 served as the frame for the selection of the NDHS sample households. A different scheme for selecting sample households was applied to urban and rural areas. A systematic sampling of households was carried out in urban areas in order to spread the NDHS sample throughout the sampled EA, while compact clustering was employed in rural areas in order to facilitate field operations. This was accomplished by taking a specified number of consecutive households starting with a household selected at random. Detailed discussion of the 1998 NDHS sampling design is presented in Appendix A. Sampling errors can be found in Appendix B.

#### 1.4 Questionnaires

There were three types of questionnaires used for the 1998 NDHS: the Household Questionnaire (NDHS Form 1), the Individual Questionnaire (NDHS Form 2), and the Health Module (NDHS Form 3). The contents of the first two questionnaires were based on the DHS Model A Questionnaire, which is designed for use in countries with relatively high levels of contraceptive use. These model questionnaires were adapted for use in the Philippines during a series of meetings with representatives from the DOH, UPPI, POPCOM, FNRI, USAID/Philippines, and Macro International Inc. Draft questionnaires were then circulated to other interested groups. These questionnaires were developed in English (see Appendix E) and were translated into six of the most common dialects, namely, Tagalog, Cebuano, Ilocano, Bicol, Hiligaynon, and Waray.

The Household (HH) Questionnaire was used to list all the usual members of the sample household, and visitors who slept in the sample household the night prior to the date of interview and some of their characteristics such as name, age, sex, education, relationship to household head, and usual residence. Information on age and sex from the HH Questionnaire was used to identify eligible women for interview using the Individual Questionnaire. Questions about the dwelling such as the source of drinking water, type of toilet facilities, ownership of various consumer goods and use of iodized were also included in the Household Questionnaire.

The Individual Questionnaire was used to collect information on the following topics:

- Background characteristics (age, education, religion, etc.)
- Reproductive history and fertility preferences
- Knowledge and use of contraception
- Availability of family planning supplies and services
- Breastfeeding and child health
- Maternal mortality

The Health Questionnaire was developed in close collaboration with the DOH in partial substitution for the cancelled National Health Survey. It included questions on health practices of the household, awareness about selected communicable and non-communicable diseases, utilization of and satisfaction with various types of health facilities, knowledge concerning traditional medicines, and health care financing.

## **1.5 Training and Fieldwork**

The NDHS questionnaires were pretested in October 1997. Female interviewers were trained at the NSO central office in Manila, after which they conducted interviews in various locations in the field under the observation of staff from NSO central office. Altogether, approximately 160 Household, Woman's and Health Questionnaires were completed. Based on observations in the field and suggestions made by the pretest field teams, revisions were made in the wording and translations of the questionnaires.

Training for the main survey took place in two phases. In the first phase, approximately 35 trainers from NSO, DOH, UPPI, and POPCOM gathered for two weeks in late January at a training center near the NSO central office in Manila. They received thorough training in how to fill and edit the questionnaires, how to supervise fieldwork, and how to train field staff in their respective training sites. These trainers then dispersed to the six training sites (Agoo, Malolos, Lucena City, Cebu City, Iloilo City, and Davao City) where they trained some 261 interviewers, 44 supervisors, and 43 field editors for three weeks (February 9-27, 1998). Initially, training consisted of lectures on how to complete the questionnaires, with mock interviews between participants to gain practice in asking questions. Towards the end of the training course, the participants spent several days in practice interviewing in households near the training sites.

Fieldwork for the NDHS was carried out by 44 interviewing teams. Each team, except that which covered Palawan, Lanao del Sur and Maguindanao, consisted of 1 supervisor, 1 field editor, and 3-7 female interviewers, for a total of 348 field staff. Fieldwork commenced on 3 March 1998 and was completed in the first week of May 1998. Periodic field monitoring of the NDHS operations was done by the NSO regional and provincial officials, NDHS regional supervisors and selected NSO central office staff.

## **1.6 Data Processing**

Review and editing of NDHS questionnaires was done by the field editors while they were in the enumeration areas to facilitate the verification of the forms. The editors were expected to review questionnaires of at least 8 households per day. The supervisors of teams with more than four interviewers assisted the editors in reviewing the questionnaires.

Folioing of forms was done by the team supervisors before submission to the Provincial Office. The Provincial Statistics Officers were responsible for the transmittal of these forms to the Central Office.

On March 16, 1998, eighteen hired NDHS data processors started the data processing at the Central Office. Office editing, data entry, key verification (100%), and machine processing were done simultaneously. There were two stages involved in the machine processing. In the first stage, keyed-in data were checked for completeness and were matched with the verification data. In the second stage, inconsistencies in the data were noted and checked. All the data processing activities were completed on June 30, 1998.

## 1.7 Response Rate

Table 1 shows the response rates for the survey and reasons for non-response. A total of 13,708 households were selected for the sample, of which 12,567 were occupied. Of these households occupied, 99 percent or 12,407 were successfully interviewed. The shortfall is primarily due to dwellings that were vacant or in which the inhabitants had left for an extended period at the time they were visited by the interviewing teams (see Appendix Table A.1 for details.)

In the households interviewed, 14,390 women were identified as eligible for the individual interview (i.e. age 15-49) and interviews were completed for 13,983 or 97 percent of them. The principal reason for non-response among eligible women was the failure to find them at home despite repeated visits to the household. The refusal rate was low.

Table 1 Sample results

Number of households, number of interviews and response rates, Philippines 1998

Result	Number	Percent
<b>Households selected</b>	13,708	100.0
Households occupied	12,567	91.6
Households absent for extended period	202	1.5
Dwelling vacant/destroyed	853	6.2
<b>Households occupied</b>	12,567	100.0
Households interviewed	12,407	98.7
Households not interviewed	160	1.3
<b>Eligible women</b>	14,390	100.0
Women interviewed	13,983	97.2
Women not interviewed	407	2.8

Source: NSO, DOH and MI, 1998 NDHS



## **CHAPTER 2**

### **BACKGROUND CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS**

Presented in this chapter are the background characteristics of the sample households and the respondents to the survey. Information on the characteristics of the households and respondents is deemed important in the interpretation of the survey results. The behavior of women concerning demographic phenomena is known to be influenced by their characteristics and their environment. Also, analysis of the reported characteristics of the sample households and the respondents can indicate the quality of the information collected and whether or not it is representative of the population.

The chapter is divided into three parts. The first part deals with the characteristics of the household population in terms of age-sex composition, household size and distribution, and educational background. The second part describes the housing environment in which the respondents live. The characteristics of the individual women respondents to the survey are discussed in the third part of this chapter.

#### **2.1 Age-Sex Composition**

The household questionnaire used in the 1998 National Demographic and Health Survey (NDHS) collected data on the demographic and social characteristics of the members and visitors in each sample household. A household, as defined in the survey, refers to a person or group of persons who usually sleep in the same housing unit and have a common arrangement for the preparation and consumption of food. A visitor, on the other hand, is someone who is not a usual resident of the household but slept in the household the night prior to the interview. In this report, except in Table 2.2 census figures, data are based on the population according to the place where they spent the night before the interview (*de facto*).

Age reporting in the Philippines is relatively accurate. The present generation of residents, including those living in the rural areas, seems to be conscious of calendar dates, especially those relating to important events in their personal lives such as birthdays. The distribution of the sampled population by single year of age and by sex is presented in Figure 2.1 and in Appendix Table C.1. Examination of the data and the graph reveals only a slight preference for digits ending in 0 and 5 when reporting ages. Another indication of the quality of age reporting is the number of women age 15 and age 49 relative to those age 14 and 50. In some surveys, including the 1993 NDS, there was displacement of women from age 15 to age 14 and from age 49 to 50, probably done intentionally by the interviewers to reduce their assigned workload. The data in Table C.1 indicate that this was not a problem in the 1998 NDHS.

The proportion of the population below 15 years is larger in rural than in urban areas, indicating a younger age structure of the rural population (Table 2.1). In urban areas, the proportion is, however, larger for males than for females but it differs little between the sexes in rural areas. On the whole, it can be said that the composition of the Philippine population by age and sex depicts a population pyramid (Figure 2.2) with a wide base and narrow top, a pattern that is typical of high fertility societies.

**Figure 2.1**  
**Single-year Age Distribution of the Household Population,  
 by Sex, Philippines**



1998 NDHS

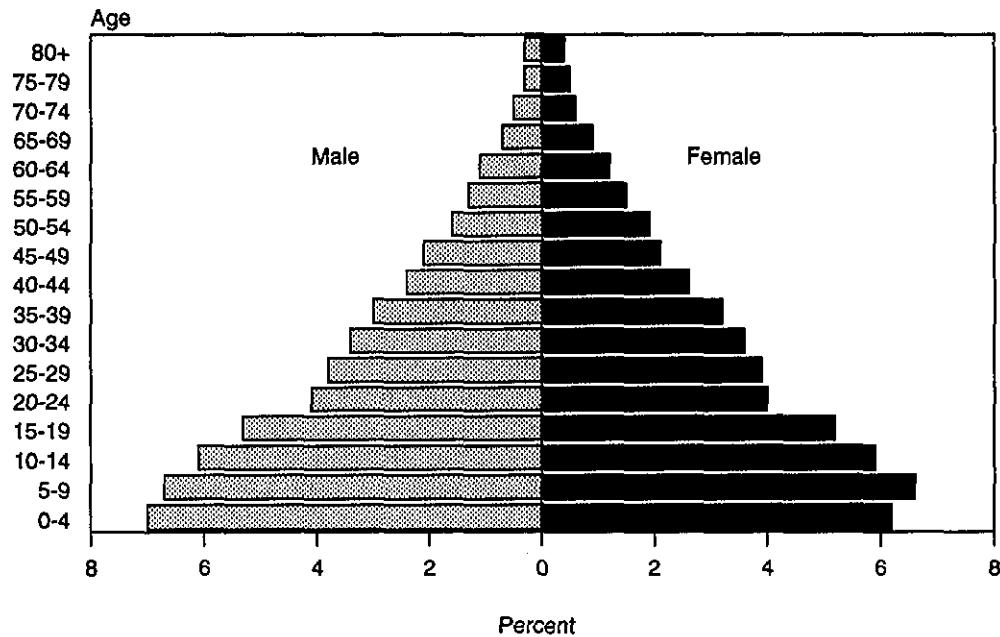
**Table 2.1 Household population by age, residence and sex**

Percent distribution of the de facto household population by five-year age groups, according to urban-rural residence and sex, Philippines 1998

Age group	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	13.1	10.8	11.9	14.9	13.9	14.4	14.0	12.3	13.2
5-9	12.1	11.1	11.6	15.0	15.0	15.0	13.6	13.0	13.3
10-14	11.2	10.4	10.8	13.2	13.1	13.2	12.2	11.7	12.0
15-19	11.2	11.6	11.4	10.1	8.9	9.5	10.7	10.3	10.5
20-24	9.7	9.3	9.5	6.8	6.7	6.7	8.2	8.0	8.1
25-29	8.6	8.8	8.7	6.6	6.7	6.7	7.6	7.8	7.7
30-34	7.4	7.8	7.6	6.5	6.5	6.5	6.9	7.2	7.0
35-39	6.4	6.6	6.5	5.8	6.1	5.9	6.1	6.4	6.2
40-44	5.1	5.6	5.4	4.6	4.7	4.6	4.8	5.2	5.0
45-49	4.3	4.2	4.3	4.0	3.9	4.0	4.2	4.1	4.1
50-54	3.2	3.7	3.5	3.2	3.6	3.4	3.2	3.7	3.4
55-59	2.5	3.0	2.8	2.7	3.1	2.9	2.6	3.1	2.8
60-64	2.0	2.2	2.1	2.3	2.7	2.5	2.2	2.4	2.3
65-69	1.2	1.7	1.5	1.5	1.8	1.7	1.4	1.7	1.6
70-74	0.9	1.2	1.0	1.3	1.4	1.3	1.1	1.3	1.2
75-79	0.5	0.9	0.7	0.7	1.0	0.9	0.6	1.0	0.8
80+	0.4	0.9	0.7	0.7	0.8	0.8	0.6	0.9	0.7
Missing/ Don't know	0.1	0.0	0.1	0.0	0.0	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	100.0
Number <sup>1</sup>	14,707	15,585	30,300	15,273	14,784	30,057	29,980	30,369	60,357

<sup>1</sup>Includes 8 cases with missing information on sex.

**Figure 2.2**  
**Distribution of the Household Population**  
**by Age and Sex, Philippines 1998**



1998 NDHS

## 2.2 Population by Age from Selected Sources

In Table 2.2, the percent distribution of the population by broad age groups, according to the 1970, 1980, 1990 and 1995 Census of Population and the 1993 NDS and 1998 NDHS are presented. There appears to be a progressive decline since 1970 in the proportion of the population under 15 and, concomitantly, an increase in the median age. The growing proportion in the 15-64 group results in a declining dependency ratio, defined as the ratio of persons in the "dependent" ages (under 15 and 65 and over) to those in the "economically active" ages (15-64). This slight aging of the population has taken place in the recent past as a result of a continuous, albeit slow decline in fertility levels. The 1993 NDS and 1998 NDHS data show fairly similar distributions by age, which supports the representativeness of the survey population.

## 2.3 Household Composition

Information on the size and composition of the sample households by urban-rural residence is presented in Table 2.3. Women head about 15 percent of the households. As expected, a higher proportion of female-headed households is noted in urban areas (17 percent) than in rural areas (12 percent). On average, a household is composed of 5.1 persons. A negligible difference in average household size is observed between urban and rural areas.

**Table 2.2 Median age and dependency ratio**

Percent distribution of the household population by broad age groups for various census years and the NDHS, Philippines 1998

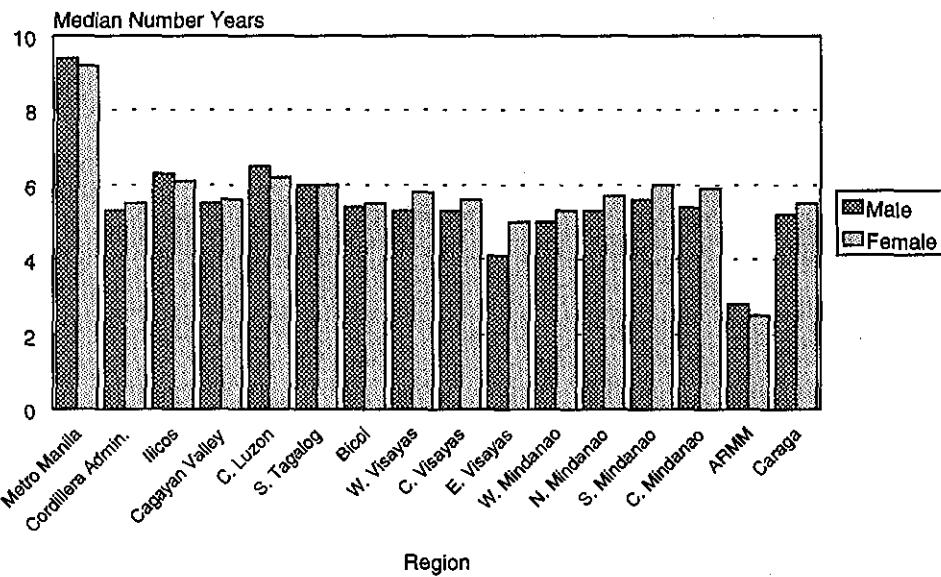
Age group	1970 Census	1980 Census	1990 Census	1993 NDS	1995 Census	1998 NDHS
Less than 15	45.7	42.0	39.5	39.3	38.4	38.5
15-64	51.4	54.6	57.1	56.8	58.1	57.3
65+	2.9	3.4	3.4	3.9	3.5	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Median age	16	18	19	20.1	20	20.6
Dependency ratio	94.6	83.2	75.1	76.1	72.2	74.5

**Table 2.3 Household composition**

Percent distribution of households by sex of head of household and household size, according to urban-rural residence, Philippines 1998

Characteristic	Residence		
	Urban	Rural	Total
<b>Household headship</b>			
Male	83.1	87.9	85.5
Female	16.9	12.1	14.5
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
1	3.8	4.3	4.1
2	8.0	9.1	8.6
3	12.6	13.8	13.2
4	18.1	16.6	17.3
5	19.6	17.7	18.6
6	14.3	14.3	14.3
7	9.4	10.3	9.9
8	6.0	6.1	6.0
9+	8.3	7.7	8.0
Total	100.0	100.0	100.0
<b>Mean size of household</b>	5.1	5.0	5.1

**Figure 2.3**  
**Median Years of Schooling by Sex and Region,**  
**Philippines 1998**



1998 NDHS

## 2.4 Education Level of the Household Population

Tables 2.4.1 and 2.4.2 present information on the highest level of education attended by the population according to sex, age, residence, and region. Education is highly valued by Filipino families. The constitution of the country reflects this and states that education, at least up to high school level, is a basic right of all Filipino children. The results of the survey indicate that the vast majority of the population does have some formal education. Among the population age 6 and over, only 4 percent have no formal education, and no more than 3 percent among those between the ages of 10 and 50 never attended school. Of both men and women, around half reached only as far as primary school, more than one in four attended high school, and one in five attended higher education.<sup>1</sup>

No major gender differences are observed as far as education is concerned. However, a significant difference is noted in the educational level between urban and rural areas. The educational system appears to favor residents of urban areas.

The distribution of the population by highest level of education attended differs greatly among the regions of the country (Figure 2.3). Metropolitan Manila has a much better educated population compared with the rest of the country; the median duration of schooling in this region is 9 years, compared with 5 or 6 years for the other regions. Residents of Autonomous Region in Muslim Mindanao have the lowest median duration of schooling.

<sup>1</sup>Comparisons with the 1993 NDS data are complicated slightly by the fact that the 1993 survey questions make it difficult to distinguish those who never attended school from those who attended but did not complete any grade. In practice, this affects only children who were currently in first grade. In 1993, such children were considered to have no education, while in 1998, they were categorized in elementary school. This accounts for the seemingly large decline between the two surveys in the proportion of 6-9 year olds with no education.

Table 2.4.1 Educational level of the male household population

Percent distribution of the de facto male household population age six and over by highest level of education attended, according to selected background characteristics, Philippines 1998

Background characteristic	Level of education					Total	Number of males	Median number of years of schooling
	None	Elementary	High school	College or higher	Don't know/missing			
<b>Age<sup>1</sup></b>								
6-9	16.3	83.0	0.0	0.0	0.6	100.0	3,247	0.1
10-14	1.6	84.2	13.9	0.1	0.2	100.0	3,670	3.8
15-19	1.1	27.2	60.2	11.4	0.1	100.0	3,197	7.7
20-24	1.3	23.4	38.7	36.5	0.1	100.0	2,464	9.5
25-29	1.3	28.8	36.2	33.5	0.2	100.0	2,275	9.3
30-34	1.3	30.1	36.2	32.3	0.1	100.0	2,076	9.3
35-39	1.7	33.7	34.3	30.3	0.1	100.0	1,833	9.1
40-44	2.0	37.7	33.4	26.8	0.1	100.0	1,444	8.6
45-49	3.0	43.2	30.1	23.8	0.0	100.0	1,255	7.2
50-54	3.3	52.2	21.5	22.8	0.2	100.0	957	5.8
55-59	4.5	57.0	19.2	18.7	0.5	100.0	778	5.5
60-64	5.2	57.1	22.7	15.0	0.1	100.0	655	5.5
65+	11.6	59.8	14.5	13.7	0.4	100.0	1,096	4.5
<b>Residence</b>								
Urban	2.3	37.4	32.9	27.2	0.2	100.0	12,444	8.0
Rural	6.0	60.2	24.2	9.3	0.3	100.0	12,512	5.1
<b>Region</b>								
Metro Manila	1.4	27.6	35.0	35.7	0.4	100.0	3,760	9.4
Cordillera Admin.	6.6	51.9	24.6	16.5	0.4	100.0	436	5.3
Ilocos	4.3	44.6	34.2	16.6	0.3	100.0	1,385	6.3
Cagayan Valley	4.8	54.2	25.9	14.9	0.2	100.0	966	5.5
C. Luzon	2.7	45.1	35.6	16.5	0.1	100.0	2,553	6.5
S. Tagalog	2.8	47.2	30.0	19.7	0.3	100.0	3,468	6.0
Bicol	3.0	61.2	25.2	10.4	0.2	100.0	1,481	5.4
W. Visayas	3.4	55.8	24.3	16.4	0.1	100.0	2,013	5.3
C. Visayas	4.0	57.3	24.0	14.6	0.2	100.0	1,899	5.3
E. Visayas	6.0	65.4	19.3	9.0	0.3	100.0	1,242	4.1
W. Mindanao	9.0	54.1	21.3	15.5	0.1	100.0	995	5.0
N. Mindanao	3.7	56.1	26.6	13.4	0.1	100.0	882	5.3
S. Mindanao	4.4	50.9	30.3	14.4	0.0	100.0	1,662	5.6
C. Mindanao	4.2	55.4	24.9	15.1	0.4	100.0	854	5.4
ARMM	25.3	46.4	16.6	10.6	1.0	100.0	707	2.8
Caraga	2.3	58.7	27.6	11.2	0.3	100.0	653	5.2
Total	4.2	48.8	28.5	18.2	0.2	100.0	24,956	5.8

<sup>1</sup>Excludes 9 men with missing age.

Table 2.4.2 Educational level of the female household population

Percent distribution of the de facto female household population age six and over by highest level of education attended, according to selected background characteristics, Philippines 1998

Background characteristic	Level of education					Total	Number of females	Median number of years of schooling
	None	Elementary	High school	College or higher	Don't know/missing			
<b>Age<sup>1</sup></b>								
6-9	12.8	86.2	0.2	0.0	0.7	100.0	3,128	0.3
10-14	1.1	81.3	17.4	0.0	0.2	100.0	3,563	4.3
15-19	0.9	16.7	65.9	16.4	0.1	100.0	3,113	8.4
20-24	1.3	17.3	40.5	40.7	0.1	100.0	2,440	9.7
25-29	2.0	21.8	40.0	36.1	0.0	100.0	2,375	9.5
30-34	1.6	27.3	36.5	34.4	0.2	100.0	2,177	9.3
35-39	2.1	33.7	32.2	31.8	0.2	100.0	1,933	9.1
40-44	2.8	37.8	30.5	28.8	0.0	100.0	1,568	7.9
45-49	3.1	45.8	24.7	26.4	0.0	100.0	1,240	6.5
50-54	5.5	55.1	17.5	21.7	0.2	100.0	1,120	5.7
55-59	5.4	60.0	18.9	15.5	0.1	100.0	931	5.5
60-64	8.0	61.6	19.8	10.2	0.4	100.0	739	5.2
65+	15.9	63.4	10.0	10.1	0.5	100.0	1,460	3.7
<b>Residence</b>								
Urban	2.3	37.1	32.6	27.8	0.2	100.0	13,541	8.0
Rural	6.5	57.1	25.1	11.1	0.3	100.0	12,255	5.3
<b>Region</b>								
Metro Manila	0.9	29.2	36.8	32.5	0.5	100.0	4,386	9.2
Cordillera Admin.	9.1	48.2	25.7	16.7	0.2	100.0	412	5.5
Ilocos	3.8	46.4	30.7	18.9	0.1	100.0	1,356	6.1
Cagayan Valley	4.5	54.1	23.9	17.4	0.1	100.0	926	5.6
C. Luzon	2.3	47.1	31.4	19.1	0.1	100.0	2,582	6.2
S. Tagalog	2.7	47.5	29.0	20.6	0.1	100.0	3,609	6.0
Bicol	3.5	58.6	24.8	12.8	0.2	100.0	1,477	5.5
W. Visayas	3.7	50.2	26.5	19.4	0.1	100.0	2,060	5.8
C. Visayas	3.9	52.4	28.0	15.6	0.2	100.0	2,050	5.6
E. Visayas	6.7	61.7	20.6	10.7	0.3	100.0	1,211	5.0
W. Mindanao	9.7	49.6	24.9	15.3	0.4	100.0	979	5.3
N. Mindanao	3.5	51.9	28.6	15.9	0.1	100.0	907	5.7
S. Mindanao	4.8	46.0	30.3	18.9	0.1	100.0	1,651	6.0
C. Mindanao	6.4	45.4	29.6	18.4	0.3	100.0	825	5.9
ARMM	30.4	41.4	16.2	10.8	1.2	100.0	715	2.5
Caraga	2.8	56.5	26.1	14.3	0.3	100.0	649	5.5
Total	4.3	46.6	29.0	19.8	0.2	100.0	25,796	6.0

<sup>1</sup>Excludes 8 women with age missing.

## 2.5 School Enrollment

Table 2.5 shows the percent distribution of the household population 6-24 years of age enrolled in school by age, sex and urban-rural residence. More than eight out of ten person's age 6 to 10 and age 11 to 15 are attending school. Between the ages of 16 and 20, the proportion of those actually enrolled diminishes significantly. Economic reasons possibly pull youth from the school system into the job market.

The probability of being in school is fairly equal for the male and female populations in urban areas except at ages 21 to 24, when men are more likely to be enrolled than women. In rural areas, however, the female population seems to get the advantage as far as schooling is concerned. This is possibly due to the fact that male children are needed more to help on the farm.

Table 2.5 School enrollment

Percentage of the de facto household population age 6-24 years enrolled in school by age group, sex, and urban-rural residence, Philippines 1998

Age group	Male			Female			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
6-10	86.8	76.4	81.0	90.2	80.4	84.7	88.5	78.3	82.8
11-15	89.5	78.7	83.6	90.7	88.7	89.7	90.1	83.6	86.6
6-15	88.1	77.5	82.2	90.5	84.2	87.0	89.3	80.8	84.6
16-20	57.2	41.4	49.9	55.1	49.7	52.9	56.1	45.1	51.4
21-24	18.1	10.1	14.8	12.0	9.8	11.1	15.1	10.0	13.0

## 2.6 Housing Conveniences

Table 2.6 and Figure 2.4 show the distribution of households with selected housing conveniences by urban-rural residence. The information on the source of water, type of sanitation facility, type of floor material and number of persons per sleeping room are indicators of the health and socioeconomic condition of households which, in turn, are associated with demographic behavior.

Seven out of ten households have electricity. However, a significant difference was noted between urban and rural areas; 91 percent of urban households have electricity compared with only half (51 percent) of rural households (Figure 2.4).

Almost half of the households have piped water (48 percent) and most of these have water piped into the residence (piped into dwelling or yard/plot). Again, a significant difference is noted between urban and rural areas. In urban areas, two out of three households have piped water, compared with only one out three households in rural areas. Wells and springs are among the main sources of water in rural areas; far fewer households in urban areas get their water from these sources. The vast majority of urban and rural households live within 15 minutes of a source of water.

**Table 2.6 Housing conveniences**

Percent distribution of households by housing convenience, according to urban-rural residence, Philippines 1998

Housing characteristic	Residence		
	Urban	Rural	Total
<b>Electricity</b>			
Yes	91.1	51.9	71.3
No	8.8	47.9	28.5
Missing	0.1	0.2	0.1
Total	100.0	100.0	100.0
<b>Source of drinking water</b>			
Piped into dwelling	46.6	14.0	30.2
Piped into yard/plot	7.8	5.4	6.6
Piped into public yard	11.4	11.7	11.6
Protected well	24.8	40.0	32.5
Unprotected well	1.9	11.2	6.6
Developed/undeveloped spring	1.9	15.0	8.5
River/stream/pond/lake/rainwater	0.5	1.5	1.1
Tanker truck/peddler	3.3	0.9	2.1
Bottled water	1.6	0.0	0.8
Other	0.1	0.1	0.1
Total	100.0	100.0	100.0
<b>Time to get to water source</b>			
Within 15 minutes	92.7	79.8	86.2
Median time (minutes)	0.0	2.9	0.0
<b>Sanitation facility</b>			
Own flush toilet	71.1	48.1	59.5
Shared flush toilet	16.3	12.1	14.2
Closed pit latrine	4.9	9.6	7.3
Open pit latrine	2.4	9.7	6.1
No facilities/field	3.6	17.0	10.3
Drop/overhang	1.4	2.9	2.1
Other	0.0	0.1	0.1
Missing	0.4	0.5	0.4
Total	100.0	100.0	100.0
<b>Flooring</b>			
Earth/sand	4.3	12.8	8.6
Wood planks	13.2	16.4	14.8
Palm/bamboo	8.7	29.8	19.3
Parquet/polished wood	1.1	1.2	1.1
Vinyl/asphalt strips	1.7	0.3	1.0
Ceramic tiles	4.8	0.9	2.8
Cement	61.0	37.5	49.1
Marble	4.9	0.9	2.9
Missing	0.3	0.2	0.2
Total	100.0	100.0	100.0
<b>Persons per sleeping room</b>			
1-2	57.9	48.0	52.9
3-4	29.1	32.7	30.9
5-6	9.6	12.9	11.3
7+	3.0	6.0	4.5
Missing/Don't know	0.4	0.3	0.4
Total	100.0	100.0	100.0
<b>Mean persons per room</b>			
	2.8	3.2	3.0
<b>Iodized salt</b>			
Iodized	15.4	6.4	10.9
Not iodized	77.5	86.7	82.2
Missing	7.1	6.9	7.0
Total	100.0	100.0	100.0
<b>Number of households</b>			
	6,151	6,256	12,407

The majority of households (81 percent) have either a flush toilet or a closed pit latrine. The proportion is much higher in urban (92 percent) than in rural areas (70 percent). A large proportion (17 percent) of rural households have no toilet facility.

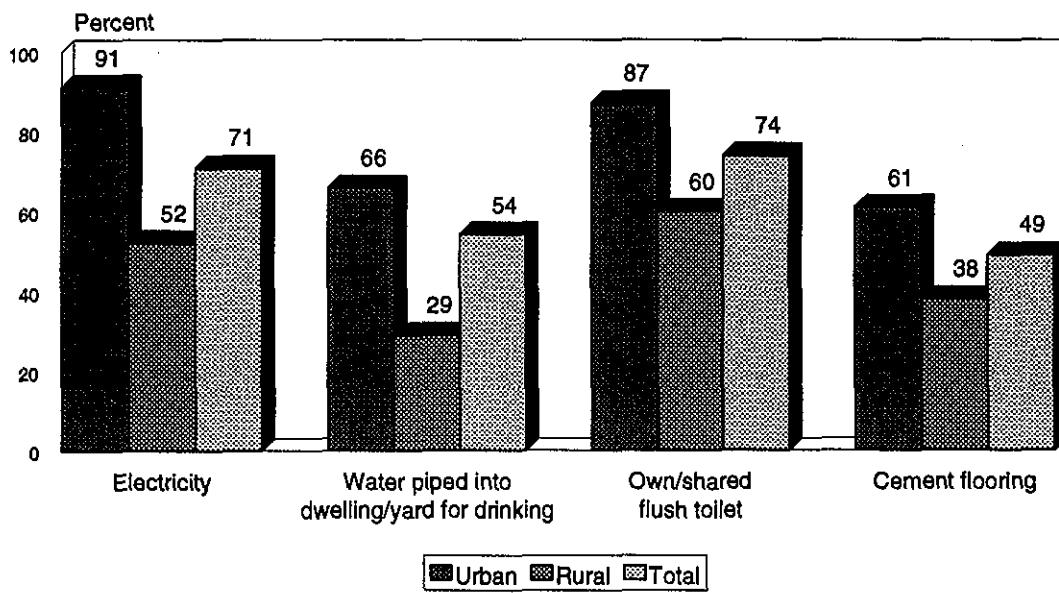
As to the type of flooring material, half of the households have cement floors and one in five have palm or bamboo floors. Urban households are more likely to use cement than rural households (61 and 38 percent, respectively). About 15 percent of households in both urban and rural areas have wood plank floors.

A question was asked about the number of rooms the household used for sleeping. The purpose was to get a measure of household crowding. On average, there were 3 persons per sleeping room. No significant difference was noted between urban and rural households in this respect.

Lack of a sufficient amount of iodine in the diet can lead to serious nutritional deficiencies such as goiter, nutritional stunting, mental retardation, and cretinism. To prevent these health problems, iodine is routinely added to salt in many countries. In order to evaluate the extent of use of iodized salt in the Philippines, NDHS interviewers tested samples of salt used in the households surveyed. The test involved placing a drop of a special solution on to a small amount of salt supplied by the household respondent. The test indicates the presence of iodine in the salt, but not its quality, which is subject to degradation. Test kits were supplied by UNICEF/Philippines.

Results show that only about 10 percent of households in the Philippines utilize iodized salt. Use of iodized salt is higher among urban than rural households.

**Figure 2.4**  
**Housing Conveniences by Residence,**  
**Philippines 1998**



1998 NDHS

## 2.7 Presence of Durable Goods in the Household

The percentage of households owning specific consumer durable goods by urban-rural residence is presented in Table 2.7. Among the durable consumer goods, radio and television are available in 80 percent and 56 percent of households, respectively. Two out of five households own a refrigerator while one out of four report owning a bicycle.

Table 2.7 Household durable goods

Percentage of households possessing specific durable consumer goods, by urban-rural residence, Philippines 1998

Durable goods	Residence		Total
	Urban	Rural	
Radio	86.0	73.8	79.8
Television	77.2	35.8	56.3
Telephone	28.7	3.1	15.8
Refrigerator	56.8	19.5	38.0
Bicycle	27.0	21.2	24.1
Motorcycle	13.1	8.8	10.9
Private car	17.6	3.7	10.6
Boat	2.2	3.7	2.9
Tractor	0.9	1.8	1.4
None of the above	7.3	20.2	13.8
Number of households	6,151	6,256	12,407

The proportion of households with such appliances varies greatly between urban and rural areas. Almost nine out of ten urban households report having a radio, compared to three out of four rural households. About 77 percent of urban households report having a television, compared to only 36 percent of rural households. A majority of urban households have a refrigerator, compared to only one out of five rural households. Urban households are more likely than rural households to own some means of transportation (a bicycle, motorcycle, or private car).

There has been an increase since 1993 in the ownership of durable goods. For example, the proportion of households with a television increased from 43 percent in 1993 to 56 percent in 1998. Over the same period, the proportion of households owning a refrigerator increased from 28 to 38 percent (NSO and MI, 1994: 19).

## 2.8 Background Characteristics of Respondents

In the household questionnaire, a total of 14,390 women were identified as eligible for interview with the NDHS individual questionnaire. Of these women, 13,983 or 97 percent were successfully interviewed. In each age group, the proportion of women interviewed was about the same.

Table 2.8.1 shows the distribution of women in the NDHS sample by selected background characteristics. More than half (53 percent) of the women interviewed in the survey are under age 30. Married women comprise 53 percent of the total women interviewed, while never-married women

constitute just over one-third. An additional 6 percent of women are living with a man.<sup>1</sup> Almost all of the women who were interviewed have had some formal education. Almost three out of ten women interviewed are in college or are college graduates, and a large proportion (42 percent) have attended high school. Roman Catholicism is the predominant religion (82 percent). With respect to ethnicity, Tagalog and Cebuano groups combined comprise more than half of the respondents.

Table 2.8.2 shows that there are more respondents from urban areas than from rural areas. One out of five respondents (20 percent) is from the Metropolitan Manila area, 10 percent were found in the northern provinces (comprising Ilocos, Cagayan Valley, and Cordillera Administrative Region), while the rest of Luzon has about 30 percent of the respondents. Visayas and Mindanao (including ARMM and Caraga) have 19 and 22 percent of the respondents, respectively.

## 2.9 Education Level of Respondents

Table 2.9 presents the percent distribution of the respondents by the highest level of education attended, according to age, urban-rural residence, and region. The data show that younger women have higher educational attainment than older women do. About 80 percent of women age 15 to 24 years have attended at least secondary level of education, compared with less than 60 percent of women age 40 and older.

As expected, women in urban areas are better educated than women in rural areas. Over 80 percent of urban women have attended at least secondary school compared to only 60 percent of rural women. Women in Metropolitan Manila, Ilocos, Central Luzon, Southern Mindanao, Western Visayas, Central Mindanao and Southern Tagalog are better educated than in other regions. More than 70 percent of the women in these regions have secondary or higher education. On the other hand, ARMM and Eastern Visayas have the lowest proportion of women with secondary or higher education at 44 and 53 percent, respectively.

## 2.10 Exposure to Mass Media

Presented in Table 2.10 is the percentage of respondents who were exposed to different types of mass media by age, education level, urban-rural residence and region. The table shows that eight out of ten women listen to the radio every day. A similar number watch television at least once a week, while almost two in three women read newspapers at least once a week. Younger women are more likely to have been exposed to mass media than older women.

A positive relationship is noted between exposure to mass media and educational attainment. Women with higher education are more likely to have been exposed to mass media. Between urban and rural areas, the proportion differs for those who read newspapers and watch television but not for those who listen to the radio.

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<sup>1</sup>In this report, women who are living together with a man are considered as currently married.

**Table 2.8.1 Background characteristics of respondents**

Percent distribution of women by selected background characteristics,  
Philippines 1998

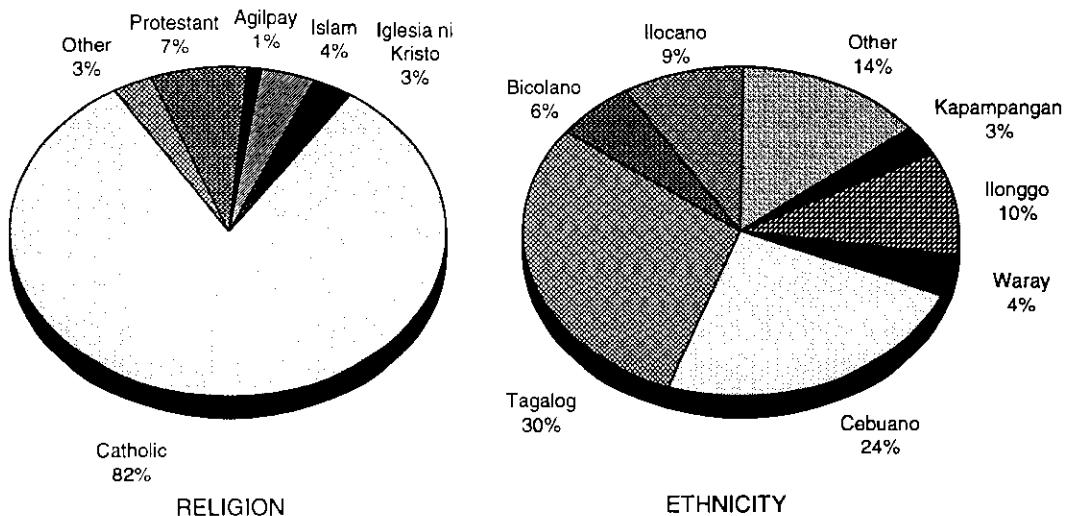
Background characteristic	Weighted percent	Number of women	
		Weighted number	Unweighted number
<b>Age</b>			
15-19	20.9	2,924	2,949
20-24	16.4	2,299	2,241
25-29	15.8	2,209	2,166
30-34	14.7	2,058	2,058
35-39	13.2	1,842	1,876
40-44	10.6	1,480	1,478
45-49	8.4	1,170	1,215
<b>Marital status</b>			
Never married	36.4	5,087	4,822
Married	53.4	7,467	7,824
Living together	6.2	869	810
Widowed	1.7	241	242
Divorced	0.0	4	8
Separated	2.3	315	277
<b>Education</b>			
No education	1.5	217	366
Elementary	26.2	3,664	4,010
High school	42.3	5,916	5,718
College or higher	29.9	4,186	3,889
<b>Religion</b>			
Catholic	82.0	11,465	10,857
Protestant	6.7	942	1,023
Iglesia ni Kristo	3.0	413	355
Aglipay	1.3	186	206
Islam	4.1	572	1,073
Other	2.8	391	446
None	0.0	5	9
Missing	0.1	10	14
<b>Ethnicity</b>			
Tagalog	29.8	4,164	2,596
Cebuano	24.0	3,358	4,092
Ilocano	9.0	1,259	1,444
Illonggo	10.1	1,408	1,273
Bicolano	5.8	814	739
Waray	3.7	513	577
Kapampangan	3.2	447	297
Other	14.4	2,014	2,954
Missing	0.0	6	11
Total	100.0	13,983	13,983

**Table 2.8.2 Background characteristics of respondents: residence and region**

Percent distribution of women by residence and region, Philippines 1998

Background characteristic	Weighted percent	Number of women	
		Weighted number	Unweighted number
<b>Residence</b>			
Urban	56.6	7,911	6,730
Rural	43.4	6,072	7,253
<b>Region</b>			
Metro Manila	20.2	2,818	1,490
Cordillera Admin.	1.5	207	589
Ilocos	4.9	689	709
Cagayan Valley	3.4	474	717
C. Luzon	10.1	1,414	953
S. Tagalog	13.7	1,917	1,181
Bicol	5.0	703	745
W. Visayas	7.5	1,045	882
C. Visayas	7.8	1,093	993
E. Visayas	4.0	553	770
W. Mindanao	3.8	530	973
N. Mindanao	3.4	482	781
S. Mindanao	6.6	925	985
C. Mindanao	3.0	425	682
ARMM	2.8	385	810
Caraga	2.3	323	723
Total	100.0	13,983	13,983

**Figure 2.5**  
**Distribution of Respondents by Religion and Ethnicity**



1998 NDHS

**Table 2.9 Level of education**

Percent distribution of women by the highest level of education attended, according to selected background characteristics, Philippines 1998

Background characteristic	Level of education				Total	Number of women
	No education	Elementary	High school	College or higher		
<b>Age</b>						
15-19	0.5	16.1	67.1	16.3	100.0	2,924
20-24	0.8	17.4	41.2	40.6	100.0	2,299
25-29	1.9	21.9	40.5	35.8	100.0	2,209
30-34	1.4	27.4	37.5	33.8	100.0	2,058
35-39	2.0	33.9	32.8	31.3	100.0	1,842
40-44	2.7	38.5	30.6	28.2	100.0	1,480
45-49	3.0	47.2	24.4	25.4	100.0	1,170
<b>Residence</b>						
Urban	0.6	17.5	43.7	38.3	100.0	7,911
Rural	2.8	37.6	40.5	19.1	100.0	6,072
<b>Region</b>						
Metro Manila	0.4	13.2	46.5	39.9	100.0	2,818
Cordillera Admin.	3.1	28.7	39.7	28.5	100.0	207
Ilocos	0.1	22.8	46.3	30.7	100.0	689
Cagayan Valley	1.4	33.9	36.0	28.7	100.0	474
C. Luzon	0.2	24.6	45.0	30.2	100.0	1,414
S. Tagalog	0.5	25.3	42.1	32.1	100.0	1,917
Bicol	0.5	36.9	40.7	21.9	100.0	703
W. Visayas	0.3	29.4	40.7	29.6	100.0	1,045
C. Visayas	0.8	33.2	42.0	24.0	100.0	1,093
E. Visayas	0.8	46.0	35.1	18.2	100.0	553
W. Mindanao	5.8	33.5	36.3	24.5	100.0	530
N. Mindanao	0.3	33.7	41.1	25.0	100.0	482
S. Mindanao	1.8	25.1	44.2	28.9	100.0	925
C. Mindanao	2.3	22.6	45.6	29.5	100.0	425
ARMM	25.6	30.6	26.0	17.8	100.0	385
Caraga	0.4	34.6	41.4	23.7	100.0	323
Total	1.5	26.2	42.3	29.9	100.0	13,983

**Table 2.10 Exposure to mass media**

Percent distribution of women who usually read a newspaper once a week, watch television once a week, or listen to a radio daily, by background characteristics, Philippines 1998

Background characteristic	No mass media	Read newspaper weekly	Watch television weekly	Listen to radio daily	All three media	Number of women
<b>Age</b>						
15-19	2.9	70.8	85.8	83.1	57.0	2,924
20-24	3.5	69.0	82.4	81.8	54.1	2,299
25-29	4.5	63.2	78.7	80.0	47.5	2,209
30-34	6.0	58.2	78.8	76.8	43.4	2,058
35-39	6.9	57.5	75.5	77.5	43.4	1,842
40-44	6.3	58.5	76.5	76.9	45.0	1,480
45-49	6.6	53.9	74.2	76.9	40.1	1,170
<b>Residence</b>						
Urban	1.9	72.9	91.6	80.3	58.9	7,911
Rural	8.9	50.1	64.3	78.5	35.0	6,072
<b>Region</b>						
Metro Manila	0.7	82.1	95.8	78.9	66.0	2,818
Cordillera Admin.	15.4	49.9	50.1	74.0	32.8	207
Ilocos	2.8	70.7	86.5	91.8	65.0	689
Cagayan Valley	7.4	59.1	64.3	79.4	39.3	474
C. Luzon	1.2	66.9	92.9	80.5	53.3	1,414
S. Tagalog	3.0	67.2	84.6	80.2	52.4	1,917
Bicol	8.1	45.0	60.1	79.5	29.0	703
W. Visayas	2.3	69.3	82.3	86.1	54.9	1,045
C. Visayas	5.6	49.4	71.7	78.1	34.5	1,093
E. Visayas	7.3	49.5	65.8	79.1	36.0	553
W. Mindanao	13.8	52.2	58.1	79.7	38.2	530
N. Mindanao	10.8	43.9	67.6	73.6	31.8	482
S. Mindanao	4.2	50.8	83.0	74.9	37.4	925
C. Mindanao	4.0	63.8	77.7	84.0	49.7	425
ARMM	31.5	34.4	28.4	60.6	18.0	385
Caraga	5.9	53.8	75.8	78.7	40.4	323
<b>Education</b>						
No education	42.6	2.6	20.1	53.6	1.8	217
Elementary	10.4	39.1	61.7	73.3	25.1	3,664
High school	2.9	64.9	84.3	81.2	50.5	5,916
College or higher	1.0	84.4	92.2	84.0	68.8	4,186
Total	4.9	63.0	79.8	79.6	48.5	13,983

## **2.11 Employment**

In the 1998 NDHS, respondents were asked if they worked, aside from doing their housework, regardless of whether they were paid or not. Table 2.11 shows that a majority of women (55 percent) were engaged in an economic activity in the last 12 months. Older women, women in urban areas and women with some college education or college degree are more likely to have been employed. For example, the proportion of women 30 years old and older who worked in the last year is about 65 percent, while for women in their 20s the proportion is 56 percent or lower. The smaller proportion of young women who work, especially those below 20 years, may be related to the practice of letting college-age children study full-time.

By residence, six out of ten women in urban areas were engaged in an economic activity in the last 12 months compared with only one-half of rural women. Across regions, more than 60 percent of women in Western Visayas, Southern Mindanao and Metro Manila were engaged in an economic activity in the 12 months preceding the survey. Only one out of 3 women worked in ARMM.

Table 2.12 shows that three out of five employed women are self-employed. It is interesting to note that self-employed women tend to be younger, live in the urban areas, and have higher educational attainment. In all regions except Ilocos, Eastern Visayas, Northern Mindanao, Central Mindanao, CAR and ARMM, self-employed women comprise a majority of the employed women. Almost one out of three employed women work for others. Ninety-five percent of working women earn cash for their work (data not shown).

## **2.12 Occupation**

Table 2.13 presents the percent distribution of currently employed women by occupation, according to selected background characteristics. The majority of the women work in sales and services (53 percent). One out of five women who work are in professional and technical occupations. Only about 11 percent of women work in agriculture.

Sales and service occupations are the most popular among all groups, except those with no education who are more likely to be working in agriculture and those with college, who tend to be employed in professional occupations.

The regional differentials show that in most regions, about half of employed women work in sales and services occupations. In Cagayan Valley, CAR and ARMM, at least one-third of working women are engaged in agricultural occupations. Central Luzon, Southern Tagalog and Central Visayas have more than 20 percent of its employed women in skilled manual occupations.

**Table 2.11 Employment status**

Percent distribution of women by employment status in the last 12 months, according to background characteristics, Philippines 1998

Background characteristic	Not currently employed		Currently employed				Number of women	
	Did not work in last 12 months	Worked in last 12 months	All year	Seasonally	Occasionally	Missing		
<b>Age</b>								
15-19	69.2	7.5	12.1	9.1	2.0	0.2	100.0	2,924
20-24	44.3	12.1	30.6	11.0	1.9	0.1	100.0	2,299
25-29	43.5	10.4	35.9	7.1	3.0	0.1	100.0	2,209
30-34	37.5	8.0	41.3	9.8	3.3	0.1	100.0	2,058
35-39	35.7	7.4	44.0	8.9	3.8	0.3	100.0	1,842
40-44	34.6	5.6	47.4	8.3	3.9	0.2	100.0	1,480
45-49	34.4	5.1	48.5	8.6	3.5	0.0	100.0	1,170
<b>Residence</b>								
Urban	40.4	7.3	40.7	9.0	2.4	0.1	100.0	7,911
Rural	51.8	9.7	25.7	9.1	3.5	0.2	100.0	6,072
<b>Region</b>								
Metro Manila	36.4	6.9	43.0	11.4	2.1	0.1	100.0	2,818
Cordillera Admin.	44.5	7.3	31.9	9.7	6.6	0.0	100.0	207
Ilocos	50.5	9.4	29.1	8.0	2.4	0.6	100.0	689
Cagayan Valley	53.7	5.7	24.4	11.4	4.6	0.1	100.0	474
C. Luzon	50.6	7.0	34.7	5.1	2.3	0.3	100.0	1,414
S. Tagalog	45.6	7.0	37.2	7.2	3.0	0.1	100.0	1,917
Bicol	58.7	10.9	19.6	6.7	4.2	0.0	100.0	703
W. Visayas	38.8	15.1	31.4	10.4	4.3	0.0	100.0	1,045
C. Visayas	42.8	7.2	38.9	9.0	1.8	0.3	100.0	1,093
E. Visayas	44.7	12.5	30.0	8.1	4.8	0.0	100.0	553
W. Mindanao	63.4	5.9	22.7	6.3	1.6	0.1	100.0	530
N. Mindanao	44.3	8.6	33.7	10.8	2.6	0.1	100.0	482
S. Mindanao	36.3	11.4	35.7	13.4	3.1	0.1	100.0	925
C. Mindanao	50.6	6.9	28.5	10.0	3.8	0.1	100.0	425
ARMM	66.8	3.7	22.4	5.7	1.1	0.4	100.0	385
Caraga	45.2	10.1	32.4	9.1	3.2	0.0	100.0	323
<b>Education</b>								
No education	58.9	5.7	22.2	9.9	3.4	0.0	100.0	217
Elementary	43.0	8.3	32.1	12.1	4.5	0.1	100.0	3,664
High school	51.7	9.1	27.2	9.0	2.9	0.2	100.0	5,916
College or higher	37.9	7.6	46.3	6.4	1.4	0.2	100.0	4,186
Total	45.4	8.4	34.2	9.0	2.9	0.1	100.0	13,983

**Table 2.12 Type of employer**

Percent distribution of currently employed women by employer, according to background characteristics, Philippines 1998

Background characteristic	Employer				Total	Number of women
	Self-employed	Works for others	Works for relative	Missing		
<b>Age</b>						
15-19	79.0	8.1	12.6	0.3	100.0	679
20-24	77.3	14.6	7.2	0.9	100.0	999
25-29	62.0	29.7	7.9	0.3	100.0	1,016
30-34	52.2	39.0	8.4	0.4	100.0	1,118
35-39	52.9	39.3	7.5	0.2	100.0	1,045
40-44	48.5	43.5	7.8	0.2	100.0	882
45-49	42.4	49.1	8.5	0.0	100.0	708
<b>Residence</b>						
Urban	66.2	26.2	7.2	0.3	100.0	4,127
Rural	46.2	43.1	10.3	0.4	100.0	2,322
<b>Region</b>						
Metro Manila	74.1	18.5	7.0	0.4	100.0	1,595
Cordillera Admin.	42.9	47.9	9.2	0.0	100.0	100
Ilocos	47.3	41.3	11.0	0.4	100.0	273
Cagayan Valley	55.5	25.5	18.9	0.0	100.0	192
C. Luzon	56.6	34.9	7.4	1.0	100.0	595
S. Tagalog	62.1	29.4	8.3	0.4	100.0	907
Bicol	51.1	40.6	7.9	0.4	100.0	214
W. Visayas	56.5	35.4	8.2	0.0	100.0	482
C. Visayas	61.0	34.3	4.4	0.2	100.0	545
E. Visayas	41.8	50.3	7.5	0.3	100.0	237
W. Mindanao	54.4	38.9	6.7	0.0	100.0	162
N. Mindanao	45.2	45.2	9.3	0.3	100.0	227
S. Mindanao	53.5	37.9	8.3	0.2	100.0	483
C. Mindanao	46.0	35.0	19.1	0.0	100.0	180
ARMM	22.3	59.1	18.2	0.4	100.0	113
Caraga	50.1	43.3	5.3	1.2	100.0	144
<b>Education</b>						
No education	26.9	54.6	18.5	0.0	100.0	77
Elementary	49.7	40.5	9.5	0.3	100.0	1,786
High school	57.0	34.6	8.0	0.5	100.0	2,314
College or higher	69.4	22.9	7.6	0.3	100.0	2,271
Total	59.0	32.3	8.4	0.3	100.0	6,448

**Table 2.13 Occupation**

Percent distribution of currently employed women by occupation and type of agricultural land worked or type of non-agricultural employment, according to background characteristics, Philippines 1998

Background characteristic	Agricultural				Non-agricultural				Total	Number of women
	Own land	Family land	Rented land	Other's land	Prof., Tech.	Sales, services	Skilled manual	Don't know		
<b>Age</b>										
15-19	0.5	1.8	0.2	4.5	5.5	75.4	10.9	1.1	100.0	679
20-24	1.0	1.3	0.3	2.8	26.7	51.7	15.7	0.6	100.0	999
25-29	1.9	1.8	0.4	4.0	30.3	49.1	11.8	0.6	100.0	1,016
30-34	2.7	2.1	0.6	6.6	23.8	50.1	13.3	0.9	100.0	1,118
35-39	2.0	2.2	0.5	8.5	23.8	48.2	13.9	0.8	100.0	1,045
40-44	2.7	2.7	0.7	7.3	20.8	53.3	11.2	1.2	100.0	882
45-49	3.9	2.7	1.4	10.9	17.8	50.4	11.9	1.0	100.0	708
<b>Residence</b>										
Urban	0.3	0.5	0.1	1.9	26.4	57.7	12.3	0.7	100.0	4,127
Rural	5.2	4.8	1.5	14.0	15.1	44.7	13.7	1.0	100.0	2,322
<b>Region</b>										
Metro Manila	0.0	0.0	0.0	0.2	27.8	61.8	10.0	0.2	100.0	1,595
Cordillera Admin.	10.9	7.0	1.4	14.1	13.7	38.7	13.0	1.1	100.0	100
Ilocos	2.1	3.9	1.8	13.2	19.2	48.0	11.4	0.4	100.0	273
Cagayan Valley	12.8	6.2	0.7	16.2	20.7	41.4	1.4	0.7	100.0	192
C. Luzon	0.7	0.2	0.0	6.5	20.0	48.6	23.9	0.0	100.0	595
S. Tagalog	1.4	1.1	0.0	4.3	23.8	47.6	21.1	0.7	100.0	907
Bicol	1.8	1.8	0.0	5.7	17.6	54.6	16.7	1.8	100.0	214
W. Visayas	1.7	2.5	0.7	11.8	18.7	53.8	6.9	3.9	100.0	482
C. Visayas	1.6	1.6	0.0	3.8	20.6	49.1	22.8	0.4	100.0	545
E. Visayas	4.2	4.5	4.5	9.1	17.0	53.6	7.0	0.0	100.0	237
W. Mindanao	4.7	5.0	0.0	3.4	26.2	55.0	5.4	0.3	100.0	162
N. Mindanao	6.8	4.6	1.4	10.1	17.4	54.8	4.6	0.3	100.0	227
S. Mindanao	1.4	2.5	0.4	10.5	21.6	54.7	7.0	1.9	100.0	483
C. Mindanao	2.8	4.8	3.8	6.9	21.8	51.9	6.9	1.0	100.0	180
ARMM	6.8	11.8	0.8	19.0	19.4	32.9	6.3	3.0	100.0	113
Caraga	1.9	1.9	1.5	12.1	19.2	58.8	4.3	0.3	100.0	144
<b>Education</b>										
No education	10.0	18.2	1.8	28.2	0.0	27.4	13.1	1.2	100.0	77
Elementary	4.6	4.2	1.6	14.9	1.6	57.9	14.0	1.3	100.0	1,786
High school	1.5	1.4	0.3	4.4	6.2	66.6	18.8	0.7	100.0	2,314
College or higher	0.4	0.5	0.0	0.6	55.8	36.2	5.9	0.7	100.0	2,271
Total	2.1	2.0	0.6	6.3	22.3	53.0	12.8	0.8	100.0	6,448

## **2.13 Earnings**

Data on who decides how to spend the money earned by employed women is shown in Table 2.14. Two out of three respondents reported that they alone decide how to spend the money they earn. About 14 percent said that their partner decides, while 18 percent jointly decide with their partner.

In all age groups, a large majority of respondents say they alone decide on how to spend their cash earnings. However, among those 35 years old and older, about one out of every four women receiving cash said that the decision to spend their earnings is made jointly with their partner. Two out of three urban residents said that they decide how to spend their money.

Although in most regions, a majority of the respondents said that they decide for themselves how to spend their money, in some regions—notably Cagayan Valley, Caraga, Northern Mindanao, and Western Visayas—one-third or more of working women say they decide with their husband how to spend their earnings.

## **2.14 Child Care While Working**

The welfare of children under six years whose mothers are employed is the focus of Tables 2.15.1 and 2.15.2. Overall, one out of three women who works has one or more children under six years old. This proportion varies by background characteristic. Rural women, less educated women, and women working for someone else or in agriculture are more likely to have a child under six. As a reflection of regional differentials in fertility, women in Bicol, Western Visayas, Eastern Visayas, Northern Mindanao, Central Mindanao and CAR are more likely to have one or more children under six years of age.

Among working women, three out of ten take care of their children under six years while they work. Relatives are also common caretakers for children of working women (28 percent). In 12 percent of cases, husbands/partners take care of children while their wife works and in 11 percent of cases, female siblings care for the children. The role of female siblings in child care is more pronounced in the rural than in the urban areas. Children whose mothers have attended some college or acquired a college degree are more likely to leave their children with servants/hired help (24 percent) or other relatives (37 percent). Children whose mothers have no education or are engaged in agricultural occupations are most likely to be cared for by their sisters.

Across regions, mothers and relatives, including female siblings, are the most important caregivers while the mother is working. Hired help or servants are common in Metro Manila. Children in Eastern Visayas and CAR are likely to be cared for by their female siblings while their mother is at work (21 percent and 20 percent, respectively).

**Table 2.14 Person who decides on use of earnings**

Percent distribution of women receiving cash earnings by person who decides on use of earnings, according to background characteristics, Philippines 1998

Background characteristic	Person who decides how earnings are used						Number of women
	Respondent only	Husband/partner	Jointly with husband/partner	Someone else	Jointly with someone	Missing	
<b>Age</b>							
15-19	80.6	1.2	1.8	11.4	4.0	1.0	100.0 636
20-24	79.6	6.0	8.6	2.5	2.5	0.9	100.0 964
25-29	65.6	14.6	17.1	1.1	1.3	0.4	100.0 982
30-34	57.1	16.9	23.7	0.7	0.4	1.2	100.0 1,064
35-39	54.8	18.6	24.9	0.5	0.6	0.7	100.0 1,008
40-44	56.1	19.3	23.0	0.6	0.3	0.6	100.0 839
45-49	57.7	15.5	25.2	0.4	0.6	0.5	100.0 664
<b>Residence</b>							
Urban	68.6	12.0	15.2	2.2	1.4	0.7	100.0 4,049
Rural	55.1	16.8	24.3	1.8	1.1	0.8	100.0 2,108
<b>Region</b>							
Metro Manila	74.1	10.9	11.5	0.8	1.7	1.0	100.0 1,579
Cordillera Admin.	49.1	15.0	27.4	4.0	1.3	3.1	100.0 79
Ilocos	61.6	20.0	16.1	0.0	0.4	2.0	100.0 248
Cagayan Valley	43.4	11.8	39.5	0.4	0.9	3.9	100.0 151
C. Luzon	66.9	15.6	13.3	2.3	1.3	0.5	100.0 579
S. Tagalog	61.5	16.7	19.3	1.8	0.5	0.2	100.0 893
Bicol	61.4	18.1	16.3	2.3	1.9	0.0	100.0 203
W. Visayas	46.9	12.1	31.5	6.4	2.6	0.5	100.0 462
C. Visayas	73.2	14.1	8.7	2.3	1.7	0.0	100.0 531
E. Visayas	54.8	13.4	25.8	4.0	1.0	1.0	100.0 215
W. Mindanao	59.9	22.6	12.2	1.7	1.4	2.1	100.0 156
N. Mindanao	56.3	8.1	33.4	0.6	0.9	0.6	100.0 205
S. Mindanao	63.8	9.6	22.6	3.4	0.4	0.2	100.0 470
C. Mindanao	62.4	19.2	15.5	2.0	0.0	0.8	100.0 153
ARMM	50.0	15.3	28.7	0.5	3.0	2.5	100.0 96
Caraga	53.9	9.4	35.2	0.6	0.6	0.3	100.0 138
<b>Education</b>							
No education	55.5	15.4	22.8	0.9	2.1	3.3	100.0 62
Elementary	62.1	13.0	20.7	2.1	1.3	0.9	100.0 1,646
High school	67.2	12.4	15.2	3.0	1.6	0.6	100.0 2,218
College or higher	62.4	15.3	19.4	1.0	1.0	0.8	100.0 2,232
Total	64.0	13.7	18.3	2.0	1.3	0.8	100.0 6,157

**Table 2.15.1 Child care while working**

Percent distribution of employed women by whether they have a child under five years of age and percent distribution of employed mothers who have a child under five by person who cares for child while mother is at work, according to background characteristics, Philippines 1998

Background characteristic	Employed women		Child's caretaker, among employed mothers who have children <5									Number of women	
	No child <5	One or more children <5	Respondent	Husband/partner	Other relative	Neighbor/friend	Hired help	School/inst'l care/other	Other female child	Other male child	Other, Missing	Total	
<b>Residence</b>													
Urban	72.3	27.7	27.5	10.3	32.9	1.0	15.0	0.3	7.6	2.0	3.4	100.0	4,127
Rural	56.0	44.0	34.3	12.7	22.8	1.4	3.2	0.1	15.1	4.7	5.7	100.0	2,322
<b>Education</b>													
No education	58.6	41.4	31.3	5.1	8.9	1.1	0.0	0.0	43.0	7.7	3.0	100.0	77
Elementary	63.5	36.5	32.2	11.6	21.1	0.8	0.1	0.2	22.3	5.9	5.8	100.0	1,786
High school	69.3	30.7	38.9	13.7	26.5	2.0	2.7	0.0	8.4	2.9	4.9	100.0	2,314
College or higher	66.1	33.9	21.8	9.5	36.5	0.7	23.9	0.5	2.9	1.2	3.0	100.0	2,271
<b>Type of employer</b>													
Work for family	67.7	32.3	27.4	3.4	29.9	0.9	9.6	0.0	16.6	6.7	5.5	100.0	539
Work for someone else	53.5	46.5	50.5	10.3	14.1	1.1	5.3	0.2	10.8	3.7	4.0	100.0	2,083
Self-employed	73.2	26.8	12.3	14.0	41.2	1.2	13.3	0.3	10.5	2.3	4.6	100.0	3,804
<b>Occupation</b>													
Agricultural	51.1	48.9	22.5	5.8	26.1	1.0	0.7	0.0	27.2	9.2	6.6	100.0	707
Non-agricultural	68.3	31.7	32.0	12.6	28.7	1.2	11.2	0.3	8.1	2.1	3.7	100.0	5,697
<b>Employment status</b>													
All year, full time	68.7	31.3	30.7	10.8	30.3	1.1	13.8	0.3	7.5	2.4	3.0	100.0	4,291
All year, part-time	59.1	40.9	24.8	17.4	21.0	1.9	4.1	0.4	21.4	5.4	3.6	100.0	488
Seasonal	66.0	34.0	32.3	10.6	29.2	1.4	1.9	0.0	15.0	4.1	5.1	100.0	1,263
Occasional	53.1	46.9	33.3	12.2	17.8	0.0	1.0	0.0	17.0	5.6	12.1	100.0	404
<b>Total</b>	<b>66.4</b>	<b>33.6</b>	<b>30.7</b>	<b>11.5</b>	<b>28.1</b>	<b>1.2</b>	<b>9.4</b>	<b>0.2</b>	<b>11.1</b>	<b>3.3</b>	<b>4.2</b>	<b>100.0</b>	<b>6,448</b>

**Table 2.15.2 Child care while working: region**

Percent distribution of employed women by whether they have a child under five years of age and percent distribution of employed mothers who have a child under five by person who cares for child while mother is at work, according to region, Philippines 1998

Region	Employed women		Child's caretaker among employed mothers who have children <5									Number of women	
	No child <5	One or more children <5	Respondent	Husband/ partner	Other relative	Neighbor/ Friend	Hired help	School/inst'l care/other	Other female child	Other male child	Other, missing		
Metro Manila	77.9	22.1	22.0	9.7	36.6	1.1	18.8	0.0	7.5	1.6	2.7	100.0	1595
Cordillera Admin.	53.9	46.1	19.1	13.7	26.7	2.3	3.1	0.0	19.8	7.6	7.6	100.0	100
Ilocos	64.1	35.9	31.7	11.9	31.7	1.0	6.9	0.0	10.9	3.0	3.0	100.0	273
Cagayan Valley	63.1	36.9	28.0	6.5	30.8	3.7	5.6	0.0	15.0	6.5	3.7	100.0	192
C. Luzon	67.3	32.7	36.6	9.9	32.8	0.8	4.6	0.0	7.6	3.1	4.6	100.0	595
S. Tagalog	64.4	35.6	29.6	9.5	31.2	1.5	11.1	0.0	7.5	4.0	5.5	100.0	907
Bicol	55.1	44.9	50.0	8.8	13.7	1.0	3.9	1.0	13.7	2.9	4.9	100.0	214
W. Visayas	59.0	41.0	29.3	19.2	27.5	1.8	6.6	0.0	9.6	1.8	4.2	100.0	482
C. Visayas	69.3	30.7	33.6	16.4	24.3	0.7	11.2	0.0	8.6	1.3	3.9	100.0	545
E. Visayas	53.6	46.4	32.7	13.1	16.3	0.7	2.0	2.0	20.9	7.2	5.2	100.0	237
W. Mindanao	63.4	36.6	29.4	8.3	33.9	0.0	8.3	1.8	13.8	0.9	3.7	100.0	162
N. Mindanao	56.7	43.3	37.1	7.5	16.4	1.3	10.1	0.0	17.0	5.0	5.7	100.0	227
S. Mindanao	65.4	34.6	27.5	14.0	24.2	0.0	8.4	0.0	14.6	4.5	6.8	100.0	483
C. Mindanao	54.7	45.3	27.5	11.5	27.5	2.3	8.4	2.3	16.0	2.3	3.8	100.0	180
ARMM	59.1	40.9	47.4	7.2	21.6	0.0	3.1	0.0	14.4	3.1	3.1	100.0	113
Caraga	60.7	39.3	31.5	7.9	27.6	1.6	11.0	0.0	11.0	3.9	5.5	100.0	144
Total	66.4	33.6	30.7	11.5	28.1	1.2	9.4	0.2	11.1	3.3	4.5	100.0	6,448

## **CHAPTER 3**

### **FERTILITY**

In line with the objective of measuring fertility levels, trends, and differentials, special care was given to administer a set of carefully worded questions to obtain accurate and reliable data on fertility. Data on fertility came from a full pregnancy history asked of all women aged 15-49 at the time of the survey. The sequence of questions was intended to derive information on all pregnancies that resulted in either a live birth or a miscarriage or still birth. For live births, women were asked questions about children still living at home, those living elsewhere, and those who had died. Since pregnancies were listed in order of occurrence, it was possible to probe cases in which the interval between pregnancies seemed too short or too long. For pregnancies not ending in a live birth, women were asked the month and year of the pregnancy termination as well as the duration of the pregnancy. For pregnancies that were lost before full term, women were asked whether a doctor or anyone else did something to end the pregnancy. This approach maximizes recall of all pregnancies and provides a richer data set for fertility analysis than a history of live births only.

The analysis in this chapter revolves around females who were born in a given time period (birth cohort) and on those who married during a given time period (marriage cohort). The fertility measures presented here are derived directly from the pregnancy history. The total fertility rate (TFR) is calculated by summing the age-specific fertility rates, and can be interpreted as the average number of births a hypothetical woman would have at the end of her reproductive life if she were subject to the currently prevailing age-specific rates from age 15 to 49. The TFR remains the most significant demographic indicator in the analysis of the impact of national population programs, particularly family planning programs, on individual or group reproductive behavior. A three-year TFR was computed to provide the most recent estimates of current levels of fertility. The three-year rate also helps reduce sampling errors and avoid problems of displacement of births reported from 5 to 6 years prior to the survey.<sup>1</sup>

#### **3.1 Current Fertility**

Fertility levels in the Philippines between 1995 and early 1998, as measured by the TFR, have declined from the levels in 1990-1993. Data in Table 3.1 indicate that for the country as a whole, the TFR is estimated at 3.7 children per woman. This represents a decline from 4.1 children per woman in 1990-1993. The age-specific fertility rates show a pattern that peaks at ages 25-29 and tapers off at the older ages. Table 3.1 also shows a general fertility rate (GFR) of 126 live births per 1,000 women age 15-44 years and a crude birth rate (CBR) of 28 births per 1,000 population. By all indicators, the current fertility level in the Philippines remains relatively high when compared with its Southeast Asian neighbors (Figure 3.1). Another notable feature of current fertility is the lower fertility of urban women in the country. The TFR for urban area is 3.0 births per woman, 1.7 less than the rural TFR. Lower urban fertility is observed across all age groups (Figure 3.2).

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<sup>1</sup>The distribution of all children by calendar year of birth shows that there is only very slight heaping of births for 1992 with small associated deficits in the years prior to and following those years (see Table C.4). The pattern of transference of births has been observed in other DHS surveys and is believed to be due to transference of births by interviewers out of the period for which the health and calendar data were collected.

**Table 3.1 Current fertility**

Age-specific and cumulative fertility rates and the crude birth rate for the three years preceding the survey, by urban-rural residence, Philippines 1998

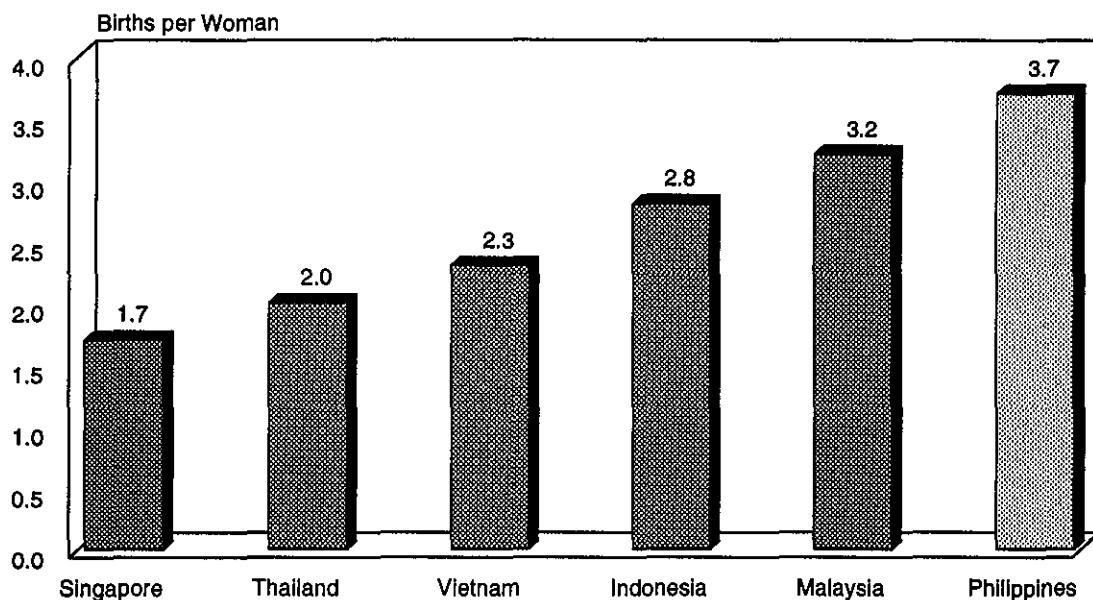
Age group	Residence		
	Urban	Rural	Total
15-19	30	69	46
20-24	137	233	177
25-29	182	247	210
30-34	133	183	155
35-39	84	142	111
40-44	32	50	40
45-49	4	10	7
TFR 15-49	3.01	4.67	3.73
TFR 15-44	2.99	4.63	3.70
GFR	101	159	126
CBR	25.8	30.1	28.0

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation.

TFR: Total fertility rate expressed per woman

GFR: General fertility rate (births divided by number of women 15-44), expressed per 1,000 women

**Figure 3.1**  
**Total Fertility Rates in Selected Countries in Southeast Asia**



Sources: Indonesia: 1997 Indonesia DHS; Philippines: 1998 NDHS  
 Other: Population Reference Bureau, 1998 World Population Data Sheet

### 3.2 Fertility by Background Characteristics

Variations in fertility are evident from the data on current and cumulative fertility shown in Table 3.2. The mean number of children ever born (CEB) to the oldest women (40-49 years of age) is an indicator of completed fertility for it reflects the fertility performance of older women who are nearing the end of their reproductive years. If fertility has remained stable over time, the two fertility measures, TFR and CEB, would be equal or similar. Although a comparison of completed fertility among women aged 40-49 years with the total fertility rate provides an indication of fertility change, this approach may be somewhat biased due to omission of births by older women. Nevertheless, consistency in the two measures with respect to urban-rural differentials and educational attainment is observed.

As noted earlier, urban women have fewer children than their rural counterparts. On average, urban women have at least one and a half children less than rural women have. This may be interpreted as arising from differences in levels of development between urban and rural areas (Figure 3.3).

Such differences are also substantiated by regional variations in fertility. Metropolitan Manila, the most developed region, exhibits the lowest TFR (2.5 children per woman) and the lowest mean number of children ever born (3 children per woman). In contrast, Eastern Visayas, one of the least developed regions in the country, shows the highest TFR (5.9) and a mean CEB of 6.2 children per woman. The difference in fertility between the two regions is more than 3 children.

The widely accepted negative effect of education on fertility is clearly borne out by the data. The depressing effect of education on fertility is best indicated by the difference in fertility rates between women with no education (5.0 children per woman) and those with higher education (2.9 children per woman). Thus, a Filipino woman without education can be expected to have almost twice as many children as a highly educated woman. The data suggest that a good mechanism for fertility reduction is to improve education of women. This would free women to spend more time on economic and other pursuits rather than childbearing which in turn would aid the family as a whole.

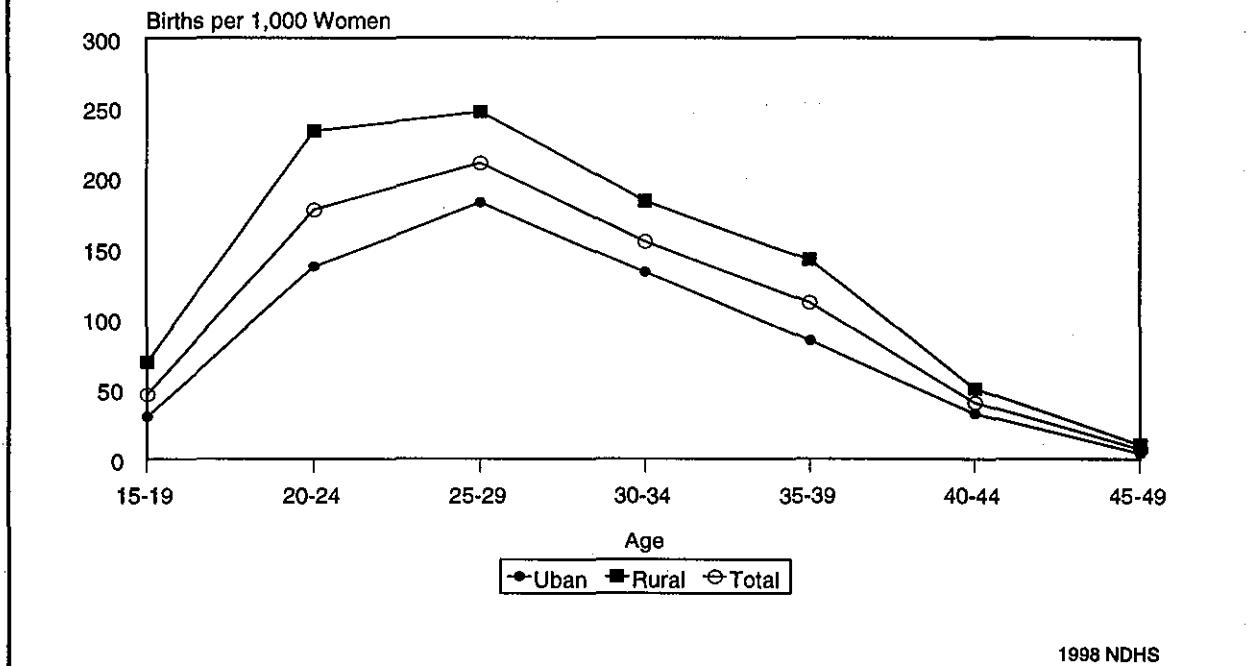
Table 3.2 Fertility by background characteristics

Total fertility rates for the three years preceding the survey and mean number of children ever born to women age 40-49, by selected background characteristics, Philippines 1998

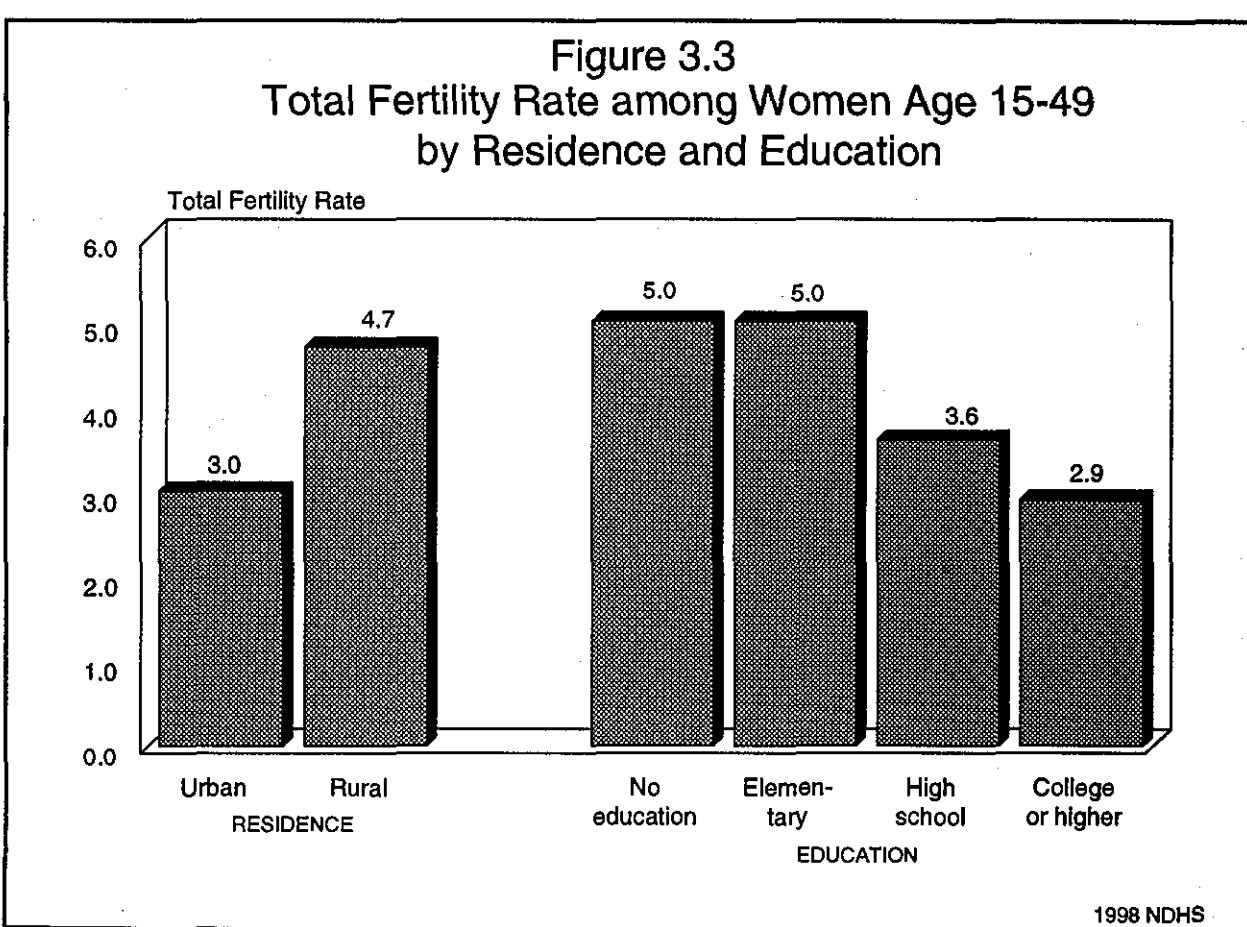
Background characteristic	Total fertility rate <sup>1</sup>	Mean number of children ever born to women age 40-49
<b>Residence</b>		
Urban	3.01	3.70
Rural	4.67	5.28
<b>Region</b>		
Metro Manila	2.49	2.95
Cordillera Admin.	4.79	5.71
Ilocos	3.43	4.99
Cagayan Valley	3.56	4.30
C. Luzon	3.52	4.15
S. Tagalog	3.69	4.09
Bicol	5.45	5.39
W. Visayas	4.02	4.48
C. Visayas	3.70	4.35
E. Visayas	5.91	6.19
W. Mindanao	3.90	4.97
N. Mindanao	4.75	5.50
S. Mindanao	3.67	4.63
C. Mindanao	4.22	5.17
ARMM	4.61	5.10
CARAGA	4.65	5.65
<b>Education</b>		
No education	5.01	5.42
Elementary	5.00	5.46
High school	3.64	4.24
College or higher	2.90	2.86
Total	3.73	4.42

<sup>1</sup> Rate for women age 15-49 years

**Figure 3.2**  
**Age-Specific Fertility Rates by Residence**



**Figure 3.3**  
**Total Fertility Rate among Women Age 15-49  
by Residence and Education**



### **3.3 Fertility Trends**

To validate the data obtained from the 1998 NDHS, age-specific fertility rates can be compared with corresponding rates from periodic national demographic surveys from 1973 to 1993. Discrepancies will reflect a combination of real change, of differences in geographic coverage, of change in data collection procedures, and of estimation techniques in one or in all surveys. Nonetheless, they serve the purpose of reflecting recent change in fertility trends in the Philippines.

Table 3.3 and Figure 3.4 shows fertility rates for the 25-year period preceding the survey. The rates reflect a five-year average centered on mid-period years for the 1973, 1978 and 1983 surveys and a three-year rate for the 1986, 1993 and 1998 surveys. In general, the TFR declines from 6.0 children per woman in 1970 to 3.7 in 1996, or a decrease of 2.3 births per woman during the 25-year period. The pace of decline in fertility over time varies. During roughly the period 1970-1975, the TFR declined by 2.4 percent annually. This was followed by a smaller decline of 0.6 percent during the succeeding five-year period. The largest decline was during the first half of the 1980s and was estimated at 3.2 percent annually. The latter half of the 1980s once again revealed a slide back in the progress of fertility reduction with just 1.1 percent annual decline during the period 1984-1991. Between 1991 and 1996, the TFR decreased annually by 1.8 percent.

Through most of the 25 years, the mean age marriage for women has remained high and relatively stable, at about 22 or 23 years. The observed decline in fertility can be attributed to changes in family planning practices.

Retrospective data from a single survey can also be used to establish fertility trends over time. Using the 1998 NDHS age-specific fertility rates (ASFR) for the last 20 years are presented in Table 3.4 by five-year periods. The ASFRs are progressively truncated with increasing number of years from the time of the survey. Due to truncation, changes over the past 20 years are observed only for women up to age 29.

In terms of internal consistency, the data substantiate a fertility decline, as the ASFRs are higher in the distant past than in the more recent past. The minimal decline of fertility among women age 20-29 shown for periods 5-9 and 10-14 years before the survey is similar to the trend observed in previous surveys and, therefore, does not necessarily suggest recall problems or omission of births by older women.

Overall, fertility decline during the past 20 years has been moderate. For women aged 15-29, the TFR declined from 2.7 (15-19 years before the survey) to 2.2 (0-4 years before the survey). A closer look at more recent fertility change by comparing ASFRs between 0-4 years and 5-9 years prior to the survey reveals that the relative reduction is largest for women under 20 years and those above age 35.

### **3.4 Fertility by Marital Duration**

Table 3.5 presents fertility rates for ever-married women by duration since first marriage for five-year periods preceding the survey. These rates are similar to the ones presented in Table 3.4 and are subject to similar problems of truncation. Declines are observed in all marital durations. For all five-year periods, marital fertility is higher in the more distant past than in the recent past.

Table 3.3 Fertility trends

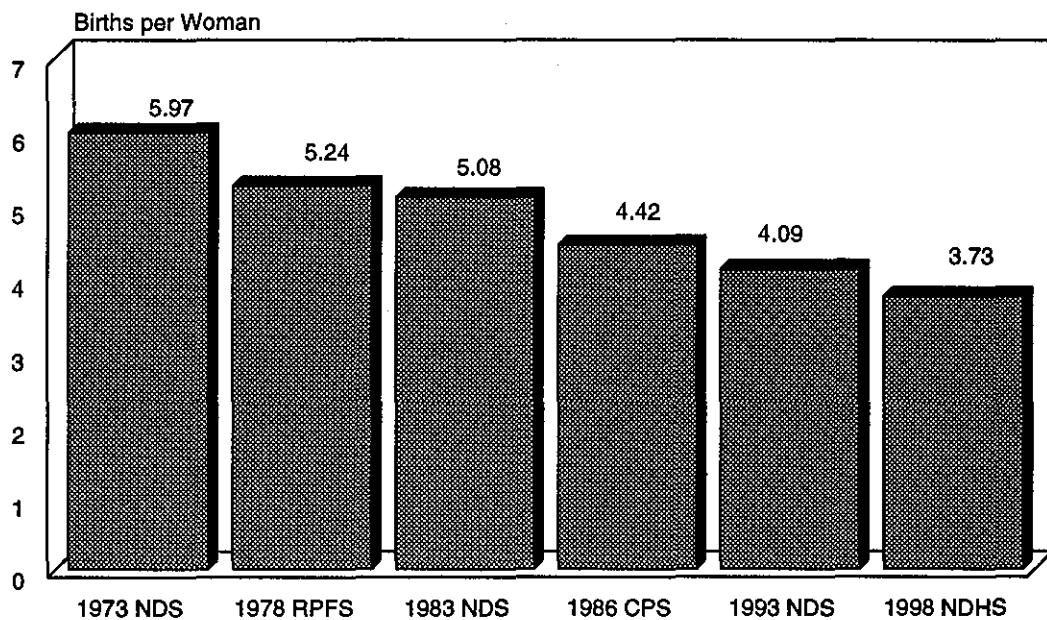
Age-specific and total fertility rates from various surveys, Philippines 1973-1998

Age	1973 NDS (1970)	1978 RPFS (1975)	1983 NDS (1980)	1986 CPS (1984)	1993 NDS (1991)	1998 NDHS (1996)
15-19	56	50	55	48	50	46
20-24	228	212	220	192	190	177
25-29	302	251	258	229	217	210
30-34	268	240	221	198	181	155
35-39	212	179	165	140	120	111
40-44	100	89	78	62	51	40
45-49	28	27	20	15	8	7
TFR	5.97	5.24	5.08	4.42	4.09	3.73

Note: Rates for 1970 to 1980 are five-year averages and 1984 to 1996, three-year averages centered on the year in parentheses.

Sources: 1970 to 1984 - Concepcion, 1991, Table 4.10  
1991 - NSO and Macro International Inc, 1994, Table 3.3

**Figure 3.4**  
**Total Fertility Rate**  
**Philippines 1970-1996**



Sources: Concepcion, 1991; NSO and MI, 1994

Table 3.4 Age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Philippines 1998

Mother's age at time of birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	50	57	64	63
20-24	177	199	207	223
25-29	210	224	226	251
30-34	161	181	189	[221]
35-39	106	124	[138]	-
40-44	43	[69]	-	-
45-49	[8]	-	-	-

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

### 3.5 Children Ever Born and Living

A basic measure of fertility is the number of children ever born (CEB) or current parity. This measure is based on a cross-sectional view at the time of survey and does not refer directly to the timing of fertility of individual respondents but is a measure of completed fertility. The number of CEB by age of women for all women and currently married women and the corresponding mean CEB as well as mean number of living children is presented in Table 3.6. Among all women, two out of five do not have any children. By contrast, only 6 percent of married women do not have any children.

Table 3.5 Fertility by marital duration

Fertility rates for ever-married women by duration (years) since first marriage, for five-year periods preceding the survey, Philippines 1998

Marriage duration at birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
0-4	370	393	404	397
5-9	221	249	247	289
10-14	143	164	205	252
15-19	93	132	158	[219]
20-24	62	117	[153]	-
25-29	27	[39]	-	-

Note: Fertility rates are per 1,000 women. Estimates enclosed in brackets are truncated.

Table 3.6 shows marked differences between married women and all women in the proportion without any children at younger ages. This is due to the fact that many women remain unmarried in their late teens and early twenties. Assuming that voluntary childlessness within marriage is rare, this figure may also be used to estimate primary sterility.

On the other hand, 3 percent of married women age 45-49 are childless. The corresponding proportion without children among all women 45-49 is higher, at 9 percent. The differences at older ages reflect the combined impact of marital dissolution, infertility and celibacy. It should be noted that while 1 out of 11 Filipino women 45-49 remains childless, about 8 percent have 10 or more births.

Table 3.6 also shows that while the proportion of women with no children decreases with age, the proportion of women at higher parities increases with age, reflecting the process of family formation over time. Also, the mean CEB for all women and currently married women increases with increasing age indicating that the data are free from gross recall bias (Figure 3.5). The mean CEB for the whole sample of women is 2.2 children, while for married women, it is 3.4 children. It is interesting to note that for women completing their childbearing (age 45-49), the mean CEB is 4.7 children among all women and 5.1 children among married women.

**Table 3.6 Children ever born and living**

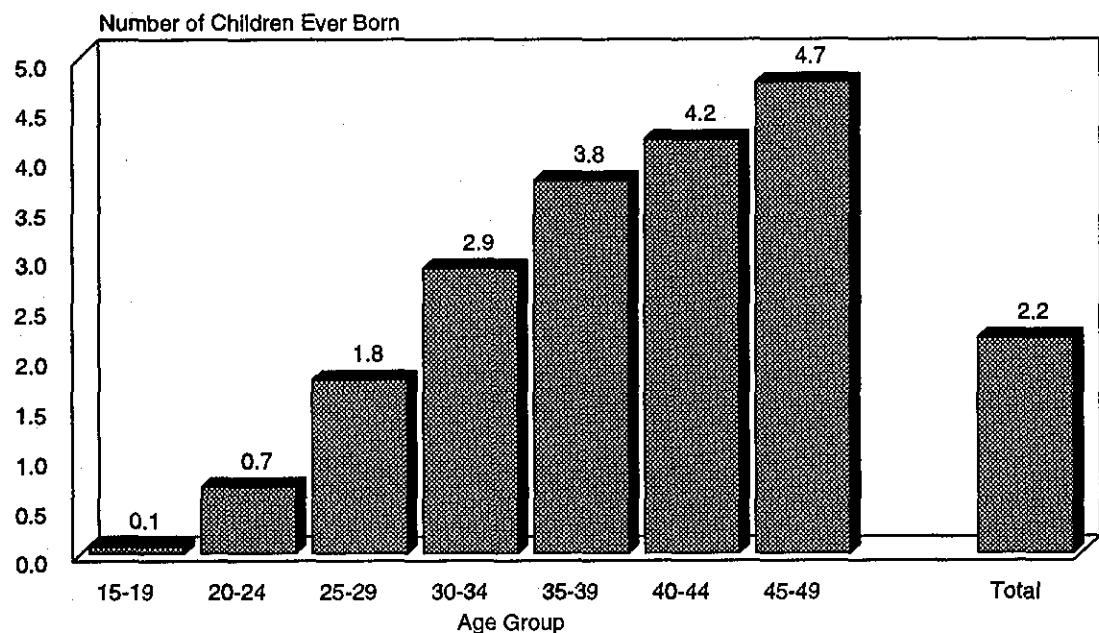
Percent distribution of all women and of currently married women by number of children ever born (CEB) and mean number of children ever born and living, according to five-year age groups, Philippines 1998

Age group	Number of children ever born (CEB)											Number of women	Mean number of CEB	Mean number of living children	
	0	1	2	3	4	5	6	7	8	9	10				
ALL WOMEN															
15-19	94.5	3.9	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,924	0.07	0.07
20-24	61.5	19.4	11.9	5.0	1.7	0.5	0.1	0.0	0.0	0.0	0.0	100.0	2,299	0.68	0.65
25-29	29.8	19.2	19.5	16.6	9.1	3.8	1.3	0.4	0.1	0.0	0.0	100.0	2,209	1.75	1.67
30-34	15.5	11.0	18.1	20.8	14.4	9.3	6.1	2.8	1.3	0.4	0.2	100.0	2,058	2.86	2.69
35-39	9.4	8.0	14.7	18.2	16.1	12.4	8.1	5.1	3.8	1.7	2.3	100.0	1,842	3.75	3.47
40-44	9.7	7.4	10.1	17.7	15.5	12.9	8.6	6.1	4.2	3.1	4.8	100.0	1,480	4.16	3.81
45-49	8.7	5.9	10.5	12.7	13.8	9.8	10.4	10.5	5.4	4.8	7.6	100.0	1,170	4.74	4.28
Total	39.9	11.0	11.9	11.9	8.7	5.9	4.0	2.7	1.6	1.0	1.5	100.0	13,983	2.16	2.00
CURRENTLY MARRIED WOMEN															
15-19	40.5	41.2	16.5	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	224	0.79	0.74
20-24	14.3	41.7	27.1	11.6	3.9	1.1	0.2	0.0	0.0	0.0	0.0	100.0	967	1.53	1.49
25-29	7.5	24.0	25.8	22.7	12.5	4.9	1.9	0.6	0.1	0.0	0.0	100.0	1,585	2.35	2.24
30-34	5.0	11.1	20.5	24.1	16.2	10.5	7.2	3.1	1.6	0.4	0.2	100.0	1,730	3.25	3.06
35-39	2.3	7.9	15.3	19.9	17.4	13.6	8.8	5.7	4.4	2.0	2.7	100.0	1,602	4.11	3.81
40-44	2.6	6.6	11.1	18.8	16.9	14.1	9.4	6.5	4.9	3.7	5.5	100.0	1,243	4.58	4.18
45-49	2.6	4.9	11.0	13.8	14.3	10.8	12.2	11.3	5.8	5.0	8.4	100.0	965	5.14	4.65
Total	6.4	16.0	18.7	18.9	13.7	9.2	6.4	4.1	2.6	1.6	2.3	100.0	8,336	3.39	3.15

Besides describing average family size, information on the number of living children at the time of interview (reported by the respondent) or the current family size (derived from the pregnancy history) can give some indication of infant and child mortality. The data show that on the average, all women have a mean of 2 children still living and currently married women have a mean of 3.2 living children. It

is notable that the mean number of CEB and of children still living are not substantially different. On the average, both groups of women had a loss of 7 percent of all live births.

**Figure 3.5**  
**Mean Number of Children Ever Born**  
**among Women Age 15-49 by Age Group**



1998 NDHS

### 3.6 Birth Intervals

The timing of births has significant influence on both fertility and mortality. There is evidence that women with closely spaced births have higher fertility than women with longer birth intervals. Similarly, studies in diverse settings consistently show that shorter birth intervals increase the incidence of infant and child deaths.

Table 3.7 shows the percent distribution of births in the five years preceding the survey by the length of the interval since the previous birth, classified by selected demographic and background characteristics of women. In general, the median length of the birth interval is slightly over 2 years, or 28 months. About 1 out of 5 births occurs four or more years after a previous birth. More than one-third of births occur within two years of a previous birth. This finding is cause for concern as it has implications for maternal and child health and survival. It has been shown that short birth intervals, particularly those less than two years in length, elevate the risk of death for mother and child (see Chapter 7).

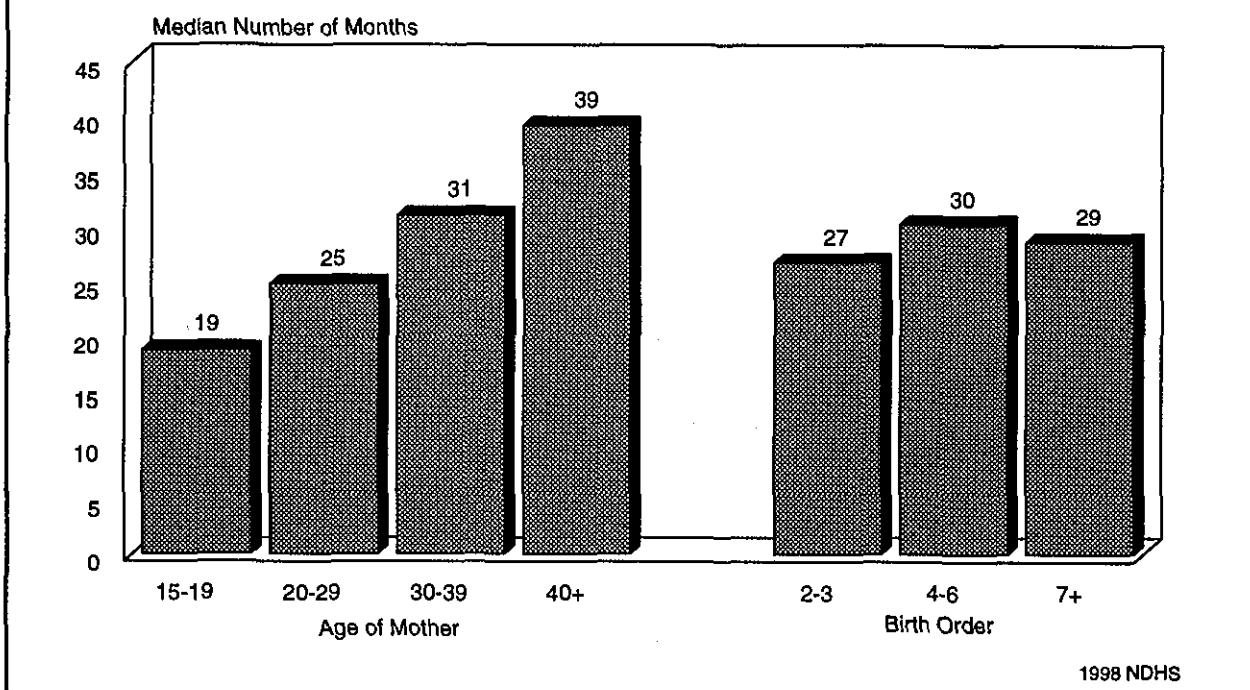
Data on median birth interval by demographic and background characteristics reveal interesting differentials. Younger women who are just beginning their reproductive years exhibit shorter median birth intervals. These are estimated at 19 and 25 months for women under 20 and those 20-29, respectively. By contrast, women who are 40 or older report a median birth interval of 39 months, an interval more than twice as long as that of women aged 15-19 (Figure 3.6).

Median birth interval exhibits a generally curvilinear relationship with birth order, increasing from 27 months for second to third births, to a peak of 30 months for fourth through the sixth births, then declining to 29 months for seventh or higher births.

The data in Table 3.7 show that the birth interval does not vary by sex of the previous child. The survival status of the previous birth influences the timing of the next birth. For women whose previous birth is still living, the next birth occurs after 29 months. For those whose previous birth did not survive, the corresponding birth interval is shorter by 3.8 months. This finding raises interesting questions on the mechanism whereby infant and child mortality influences birth intervals and fertility, particularly the question of whether mothers seek to replace deceased children as soon as possible.

Urban-rural residence and mother's education seem to exert some effect on the length of birth intervals. For women who live in urban areas, the median birth interval is 29.3 months, 1.5 months longer than for women who live in rural areas. As expected, better educated women space births more widely than uneducated women. Women with college education or higher have a median birth interval 4 months longer than women without schooling.

**Figure 3.6**  
**Median Number of Months Since Previous Birth**  
**by Age of Mother and Birth Order**



**Table 3.7 Birth intervals**

Percent distribution of births in the five years preceding the survey by number of months since previous birth, according to demographic and socioeconomic characteristics, Philippines 1998

Characteristic	Number of months since previous birth					Total	Median number of months since previous birth	Number of births
	7-17	18-23	24-35	36-47	48+			
<b>Age of mother</b>								
15-19	47.9	20.3	31.1	0.7	0.0	100.0	18.7	49
20-29	21.7	25.1	33.2	10.6	9.4	100.0	24.7	2,182
30-39	14.2	15.5	29.5	14.5	26.2	100.0	31.0	2,815
40+	8.7	11.0	24.0	17.9	38.4	100.0	39.1	605
<b>Birth order</b>								
2-3	20.0	20.2	28.0	11.7	20.2	100.0	26.7	2,855
4-6	13.3	17.2	31.7	14.7	23.1	100.0	30.2	1,993
7+	14.4	17.7	35.3	15.1	17.5	100.0	28.6	803
<b>Sex of prior birth</b>								
Male	16.5	17.8	30.8	13.8	21.0	100.0	28.7	2,917
Female	17.2	19.8	29.8	12.6	20.6	100.0	27.8	2,734
<b>Survival of prior birth</b>								
Living	15.8	19.0	30.8	13.4	21.0	100.0	28.5	5,327
Dead	33.8	15.5	23.6	9.6	17.4	100.0	24.7	324
<b>Residence</b>								
Urban	18.2	16.7	27.1	13.5	24.5	100.0	29.3	2,439
Rural	15.8	20.4	32.8	13.0	18.0	100.0	27.8	3,212
<b>Region</b>								
Metro Manila	17.9	13.4	28.3	13.4	27.0	100.0	30.3	707
Cordillera Admin.	16.7	21.6	33.0	13.8	14.9	100.0	28.0	122
Ilocos	14.1	20.0	36.1	11.8	18.0	100.0	28.6	248
Cagayan Valley	13.8	16.4	29.7	16.0	24.2	100.0	31.4	178
C. Luzon	17.5	19.6	21.6	11.4	29.8	100.0	29.2	507
S. Tagalog	17.7	19.3	28.9	13.4	20.8	100.0	28.9	826
Bicol	17.0	20.1	35.9	13.6	13.4	100.0	27.1	423
W. Visayas	17.4	19.3	30.4	13.8	19.1	100.0	27.6	429
C. Visayas	13.6	18.2	38.5	11.5	18.2	100.0	28.1	429
E. Visayas	17.6	20.2	31.0	14.0	17.2	100.0	27.7	370
W. Mindanao	15.5	18.1	29.9	16.2	20.2	100.0	28.7	231
N. Mindanao	15.8	21.5	31.5	14.1	17.2	100.0	26.7	259
S. Mindanao	17.0	21.4	24.4	13.2	24.1	100.0	28.3	343
C. Mindanao	18.4	17.5	31.3	13.6	19.3	100.0	28.1	207
ARMM	18.1	21.4	32.2	13.1	15.3	100.0	26.5	218
Caraga	17.5	19.3	33.9	10.5	18.7	100.0	26.9	153
<b>Education</b>								
No education	18.9	21.8	27.7	14.7	16.9	100.0	26.2	151
Elementary	14.3	19.9	35.0	13.6	17.2	100.0	28.2	2,191
High school	17.6	19.5	29.9	11.9	21.2	100.0	27.9	2,092
College or higher	19.9	15.3	23.1	14.6	27.1	100.0	30.2	1,216
Total	16.8	18.8	30.3	13.2	20.8	100.0	28.3	5,651

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

### 3.7 Age at First Birth

Onset of childbearing is an important fertility indicator. Postponing the first birth and lengthening the interval between subsequent births can contribute to fertility reductions. As can be seen in Table 3.8, early childbearing in the Philippines is not commonplace. Among women age 45-49, only 1 percent had their first birth at less than 15 years of age. This proportion diminishes among younger women. The reduction in the proportion giving birth in their early teens is associated with the rise in age at first marriage, which has been sustained during the past 25 years.

Even if age at first birth as reported by older women is subject to omission or misdating of early births, information gathered among women age 45-49 still gives some indication of the timing of first births and the tempo of fertility. Four out of 10 women in the oldest age group had their first birth during their early twenties (38 percent) and three out of ten (29 percent) after age 25. A similar pattern is found for younger women, with a larger proportion of women 30-34 having their first birth at age 20-24 than after age 25 (37 and 23 percent, respectively). Clearly, most Filipino women have their first birth during their early twenties rather than in their teens. The median age at first birth shows a slight increase from 23 years among older women to 24 years among women age 25-29.

Differentials in age at first birth by selected background characteristics are presented in Table 3.9. The median age at first birth among women age 25-49 is 23.3 years.

Filipino women in urban areas are about two years older than their rural counterparts when they first enter motherhood. Regional variations are less distinct but median age at first birth exceeds that of the country as a whole in two regions—Western Visayas and Central Visayas. Sharp education differentials, however, are observed. Women with higher education exhibit a median age at first birth higher than that of the unschooled women. The direct correlation between median age at first birth and education indicates the postponement of marriage and eventual first birth among women who stay longer in school.

Table 3.8 Age at first birth

Percent distribution of women age 15-49 years by age at first birth, according to current age, Philippines 1998

Current age	Women with no births	Age at first birth						Number of women	Median age at first birth
		<15	15-17	18-19	20-21	22-24	25+		
15-19	94.5	0.2	3.4	1.9	NA	NA	NA	100.0	2,924
20-24	61.5	0.5	6.6	13.4	11.5	6.5	NA	100.0	2,299
25-29	29.8	0.7	6.4	13.0	16.5	20.6	13.0	100.0	2,209
30-34	15.5	1.0	8.1	15.2	15.5	21.5	23.2	100.0	2,058
35-39	9.4	0.6	8.7	13.3	18.2	21.4	28.5	100.0	1,842
40-44	9.7	0.9	9.7	15.8	15.9	21.6	26.3	100.0	1,480
45-49	8.7	1.0	8.8	14.3	16.6	21.4	29.1	100.0	1,170

NA = Not applicable

<sup>a</sup>Less than 50 percent of the women in the age group  $x$  to  $x+4$  had a birth by age  $x$

### **3.8 Teenage Fertility**

As noted earlier, early childbearing, particularly births occurring before age 20, affects only a small segment of the population. However, this does not mean that the level of teenage childbearing and motherhood does not pose social and health threats to society. Table 3.10 presents data on fertility among women age 15-19 (teenagers) at the time of the survey. Of the women in this age group, 7 percent have begun childbearing (6 percent are already mothers and 2 percent are pregnant with their first child).

Differences between subgroups of these women are evident. As expected, the proportion of women who have begun childbearing increases linearly with age, from less than one percent among those age 15 years to 21 percent among those age 19 years. Rural teenagers are almost twice as likely (11 percent) to experience teenage pregnancy as their urban counterparts (5 percent) (see Figure 3.7).

Consistent with urban-rural and regional differentials, the less urbanized regions of ARMM, Western Mindanao, Eastern Visayas, and Cagayan Valley all share higher proportions of teenage fertility relative to other regions of the country (Figure 3.8). This is particularly true for ARMM, a predominantly Muslim region, where cultural factors impinging on women's roles and status may partially explain the high proportion of teenagers who begun childbearing early (13 percent). In comparison, Metropolitan Manila, the premier region of the country, has the lowest proportion of teenagers who have begun childbearing (4 percent).

It may be inferred from the data that teenagers in urban areas where educational facilities are concentrated, particularly in Metropolitan Manila, have other alternatives in life than early childbearing. Another interpretation is that teenagers in urban areas and more urbanized regions and those in school have greater access to information and may therefore, be more knowledgeable on matters of safe sex.

The preventive effect of education on early childbearing is borne out by the data. There is a gradual decrease in the proportion who having begun childbearing from 17 percent among teens who had never been to school to 5 percent among those with higher education.

Table 3.9 Median age at first birth

Median age at first birth among women age 25-49 years, by current age and selected background characteristics, Philippines 1998

Background characteristic	Current age					Ages 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	25.3	24.3	23.9	23.7	24.1	24.3
Rural	22.3	22.3	22.3	22.0	22.2	22.2
<b>Region</b>						
Metro Manila	a	25.7	24.7	24.3	25.1	a
Cordillera Admin.	21.7	22.5	21.9	20.7	22.3	21.8
Ilocos	24.3	23.3	22.6	24.5	21.6	23.2
Cagayan Valley	21.6	21.2	21.7	22.2	22.0	21.7
C. Luzon	23.5	23.3	23.7	22.9	23.3	23.3
S. Tagalog	23.4	22.9	23.6	23.1	23.0	23.2
Bicol	22.7	22.7	23.1	22.2	22.3	22.6
W. Visayas	24.8	23.8	22.8	24.0	24.8	24.0
C. Visayas	24.0	22.9	23.5	22.7	24.0	23.5
E. Visayas	22.9	21.3	21.3	20.8	21.9	21.6
W. Mindanao	22.8	22.2	22.4	21.3	22.8	22.3
N. Mindanao	23.5	22.9	22.4	21.0	21.9	22.6
S. Mindanao	23.3	22.9	22.9	22.1	22.6	22.7
C. Mindanao	22.0	23.1	23.8	21.6	21.7	22.7
ARMM	21.7	20.8	21.3	22.3	23.6	21.8
Caraga	23.4	23.2	21.6	20.9	22.1	22.3
<b>Education</b>						
No education	19.9	20.0	20.4	20.4	21.8	20.5
Elementary	20.9	20.8	21.2	21.0	21.4	21.1
High school	23.0	22.7	22.6	22.4	22.9	22.7
College or higher	a	26.0	26.6	26.3	27.1	a
Total	23.9	23.4	23.1	22.9	23.1	23.3

Note: The medians for the 15-19 cohort and for the 20-24 cohort could not be determined because half the women have not yet had a birth

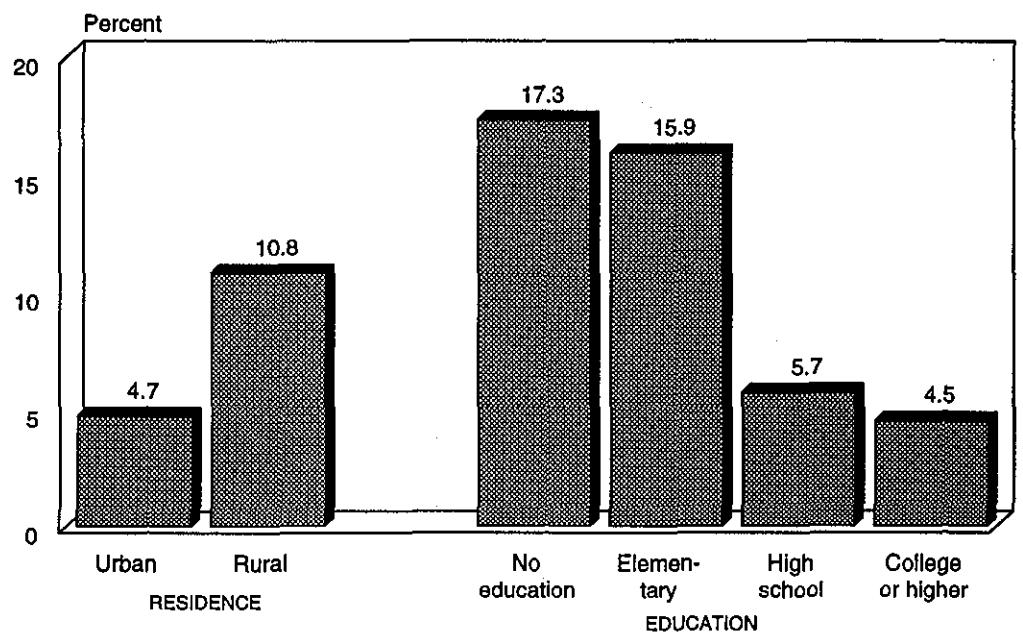
<sup>a</sup>Medians were not calculated for these cohorts because less than 50 percent of women in the age group x to x+4 have had a birth by age x.

**Table 3.10 Teenage pregnancy and motherhood**

Percentage of teenagers age 15-19 years who are mothers or pregnant with their first child, by selected background characteristics, Philippines 1998

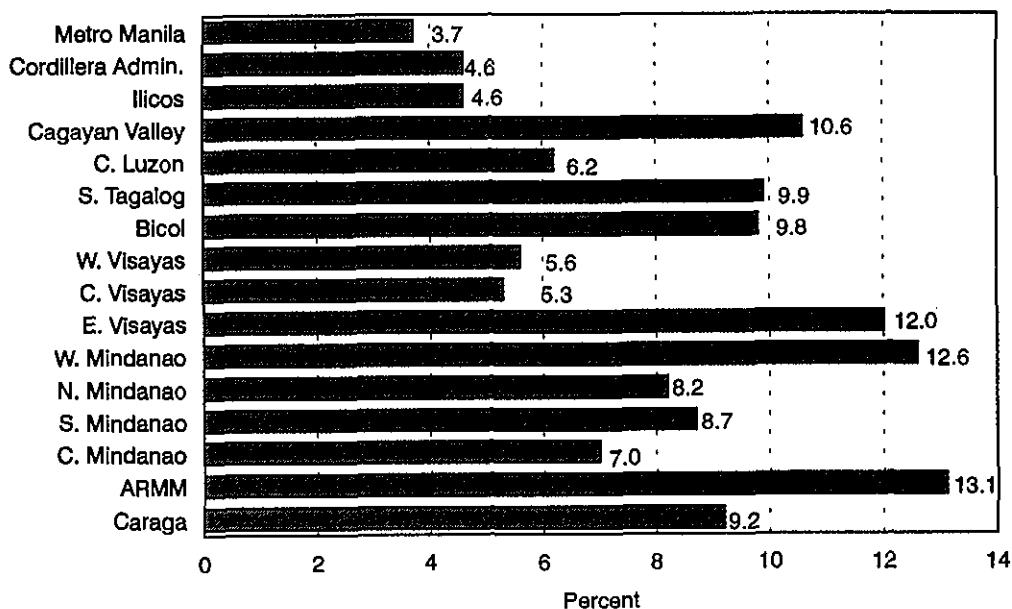
Background characteristic	Percentage who are:		Percentage who have begun child-bearing	Number of teenagers
	Mothers	Pregnant with first child		
<b>Age</b>				
15	0.3	0.2	0.5	624
16	0.8	0.8	1.6	613
17	3.6	1.4	5.0	589
18	7.8	2.6	10.5	602
19	17.0	4.2	21.3	497
<b>Residence</b>				
Urban	3.4	1.3	4.7	1,701
Rural	8.3	2.4	10.8	1,223
<b>Region</b>				
Metro Manila	2.8	0.9	3.7	605
Cordillera Admin.	2.3	2.3	4.6	46
Ilocos	3.3	1.3	4.6	147
Cagayan Valley	5.0	5.6	10.6	106
C. Luzon	5.1	1.0	6.2	289
S. Tagalog	7.2	2.7	9.9	360
Bicol	8.4	1.4	9.8	135
W. Visayas	4.6	1.0	5.6	233
C. Visayas	4.3	1.0	5.3	228
E. Visayas	8.5	3.5	12.0	102
W. Mindanao	8.3	4.4	12.6	112
N. Mindanao	7.0	1.2	8.2	106
S. Mindanao	6.4	2.3	8.7	206
C. Mindanao	5.7	1.3	7.0	98
ARMM	11.4	1.7	13.1	83
Caraga	7.8	1.3	9.2	68
<b>Education</b>				
No education	17.3	0.0	17.3	15
Elementary	11.5	4.4	15.9	471
High school	4.5	1.2	5.7	1,962
College or higher	3.0	1.5	4.5	476
Total	5.5	1.8	7.2	2,924

**Figure 3.7**  
**Percentage of Women Age 15-19 (Teenagers) Who Have Begun Childbearing by Residence and Education**



1998 NDHS

**Figure 3.8**  
**Percentage of Women Age 15-19 (Teenagers) Who Have Begun Childbearing by Region**



1998 NDHS

## CHAPTER 4

### FAMILY PLANNING

#### 4.1 Knowledge of Family Planning Methods and Their Sources

Lack of knowledge of family planning methods and their sources is a major obstacle to the use of contraception. As in other DHS surveys, information about knowledge of family planning methods and of the places where they can be obtained was generated by asking the respondent to name the ways or methods that a couple can use to delay or avoid a pregnancy. If the respondent did not spontaneously mention a particular method, the interviewer described that method and asked the respondent if she recognized it. Thirteen methods (pill, IUD, injection, condom, ligation or female sterilization, vasectomy or male sterilization, calendar/rhythm method/periodic abstinence, mucus/Billings/ovulation, basal body temperature, symptothermal, lactational amenorrhea method or LAM, breastfeeding, and withdrawal) were described in the questionnaire. Other methods not provided in the questionnaire but mentioned spontaneously by the respondent were also recorded. For all methods mentioned or recognized, the respondent was asked if she had ever used the method and if she knew where a person could obtain the method or, in the case of natural family planning, advice on how to use natural family planning.<sup>1</sup>

Among currently married women as well as all women, virtually all respondents know of one or more family planning methods (99 percent and 98 percent, respectively) or a modern method (98 percent and 97 percent, respectively) (Figure 4.1 and Table 4.1). This high level of general contraceptive awareness has been observed in previous surveys, including the 1983, 1988, and 1993 National Demographic Surveys and the 1986 Contraceptive Prevalence Survey (Concepcion, 1991). Knowledge of traditional methods is only slightly less common than knowledge of modern methods.

The more widely known modern methods are the pill, condom, female sterilization, IUD, and injection. The least known modern methods include lactational amenorrhea method (LAM) and symptothermal method. Slightly less than 90 percent of married women are aware of the calendar/rhythm method and withdrawal.

Not all who claim to know a family planning method know where they can obtain it; however, the gap between knowledge of contraceptive methods and knowledge of their sources among married women is very small. Ninety-five percent know a source for the pill, 91 percent for condom, 87 percent for female sterilization, 86 percent for the IUD, 83 percent for injections, and 72 percent for male sterilization. It is not surprising that a smaller percentage of currently married women know a place where one can obtain advice on how to use the mucus/Billings/ovulation (22 percent), basal body temperature (20 percent), LAM (13 percent), and symptothermal methods (9 percent), which are not well known contraceptive methods.

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<sup>1</sup>In this report, the term natural family planning refers to mucus/Billings/ovulation, basal body temperature and symptothermal methods. In the 1993 NDS, questions did not differentiate between the various methods of periodic abstinence and the term includes both rhythm and periodic abstinence.

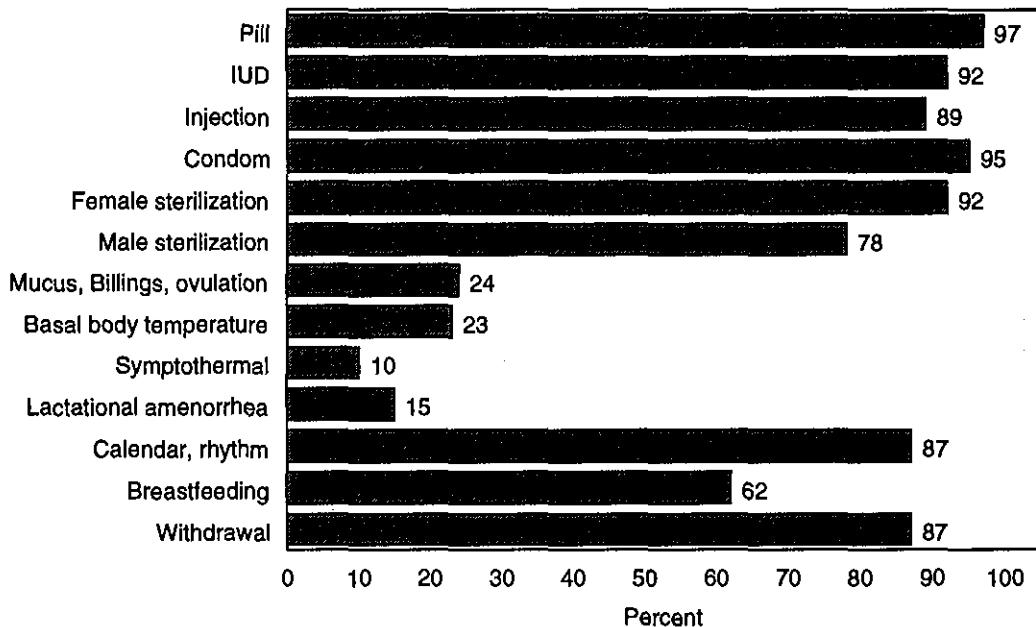
**Table 4.1 Knowledge of contraceptive methods and a source for methods**

Percentage of all women and currently married women who know specific contraceptive methods and who know a source (for information or services), by specific methods, Philippines 1998

Contraceptive method	Know method		Know a source	
	All women	Currently married women	All women	Currently married women
<b>Any method</b>	97.6	98.6	93.8	96.4
<b>Modern method</b>	97.0	98.0	93.7	96.4
Pill	95.9	97.3	90.8	94.6
IUD	86.7	91.8	78.4	85.5
Injection	82.8	89.1	75.8	83.3
Condom	93.4	95.4	86.7	90.7
Female sterilization	87.8	92.2	81.4	87.2
Male sterilization	69.4	78.4	63.2	71.8
Mucus, Billings, ovulation	20.8	23.8	18.6	21.6
Basal body temperature	20.7	22.6	18.2	20.0
Syntothermal	9.5	10.4	8.5	9.3
Lactational amenorrhea	13.4	15.0	11.9	13.4
<b>Traditional method</b>	88.2	94.1	71.0	80.1
Calendar, rhythm	78.6	87.1	71.0	80.1
Breastfeeding	54.9	62.2	NA	NA
Withdrawal	75.9	87.3	NA	NA
Other traditional methods	6.5	8.0	NA	NA
Total	13,983	8,336	13,983	8,336

NA = Not applicable

**Figure 4.1**  
**Knowledge of Contraception among**  
**Currently Married Women Age 15-49**



1998 NDHS

Except for women in the age group 15-19, the level of knowledge of any method, modern methods, and sources for modern methods does not vary greatly by age. The age group 15-19 shows the lowest proportion having knowledge of methods and their sources (Table 4.2). There is also little difference in levels of knowledge by urban-rural residence, where the urban level is higher by only about two percentage points than the rural level.

**Table 4.2 Knowledge of modern contraceptive methods and source for methods**

Percentage of currently married women who know at least one modern contraceptive method and who know a source (for information or services), by selected background characteristics, Philippines 1998

Background characteristic	Know any method	Know a modern method <sup>1</sup>	Know a source for modern method	Number of women
<b>Age</b>				
15-19	96.5	96.0	90.6	244
20-24	98.7	98.2	96.2	967
25-29	98.7	98.0	96.7	1,585
30-34	99.0	98.3	96.7	1,730
35-39	98.8	98.0	96.9	1,602
40-44	98.5	98.1	96.7	1,243
45-49	97.9	97.3	95.6	965
<b>Residence</b>				
Urban	99.3	99.0	97.9	4,222
Rural	97.8	96.8	94.8	4,114
<b>Region</b>				
Metro Manila	99.7	99.6	98.1	1,298
Cordillera Admin.	99.2	99.0	95.1	136
Ilocos	100.0	100.0	99.3	414
Cagayan Valley	99.0	98.4	96.5	322
C. Luzon	99.3	99.3	98.3	883
S. Tagalog	99.7	99.6	97.1	1,219
Bicol	99.6	99.4	97.8	481
W. Visayas	100.0	100.0	98.5	627
C. Visayas	99.6	99.6	98.8	620
E. Visayas	99.5	99.1	96.7	395
W. Mindanao	91.0	90.3	89.5	343
N. Mindanao	100.0	100.0	99.2	295
S. Mindanao	99.3	99.2	98.4	572
C. Mindanao	98.4	98.4	96.3	273
ARMM	77.9	61.9	57.5	252
Caraga	100.0	99.8	99.1	208
<b>Education</b>				
No education	64.9	51.1	44.0	169
Elementary	98.6	97.7	95.0	2,756
High school	99.5	99.3	98.3	3,050
College or higher	99.8	99.8	99.2	2,361
Total	98.6	98.0	96.4	8,336

<sup>1</sup>Includes pill, IUD, injection, condom, female sterilization, male sterilization, mucus/Billings/ovulation, basal body temperature, symptothermal method and lactational amenorrhea method (LAM).

When it comes to regional variations, only ARMM deviates from the practically universal knowledge of any method and any modern method. It is in the level of knowledge of a place to obtain a modern method that larger regional differentials exist. Women in Ilocos Region, Central Visayas, Northern Mindanao and Caraga have the highest levels of knowledge of a source for a modern method (at least 99 percent). ARMM shows the lowest level (58 percent).

Excluding women with no education, there are no substantial differentials in the proportion knowing at least one contraceptive method and a source for a modern method by level of education. Women with no education are much less likely to know about methods or their sources.

#### **4.2 Ever Use of Family Planning Methods**

For each method mentioned spontaneously or recognized after probing, the respondent was asked if she had ever used it. While the information is available for all women and married women, the analysis primarily focuses on married women who are at the greatest risk of pregnancy (Table 4.3). Seven in 10 married women have used a family planning method at some time; 53 percent have used a modern method and 44 percent have used a traditional method. The most popular modern method is the pill (36 percent) followed by the condom (14 percent), female sterilization (10 percent), and the IUD (9 percent). The remaining modern methods have small proportions of ever users. Among the traditional methods, withdrawal is the most popular (33 percent), followed by the calendar/rhythm method (24 percent).

In general, the level of ever use increases with age up to age 35-39, and then declines. However, the pattern varies for specific modern methods; ever use of the pill peaks at age 30-34, IUD use at age 35-39, and female sterilization use at age 40-44.

**Table 4.3 Ever use of contraception**

Among all women and currently married women, the percentage who have ever used a contraceptive method, by specific method and age, Philippines 1998

Age	Any method	Any modern method	Modern methods									Traditional methods				Number of women	
			Pill	IUD	Injection	Condom	Female sterilization	Male sterilization	Mucus, Billings, ovulation	Basal body temperature	Sympto-thermal	Lac-tational amenor-rhea	Any traditional method	Calen-dar, rhythm	With-drawal	Other meth-ods	
<b>ALL WOMEN</b>																	
15-19	2.6	1.8	1.3	0.3	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.4	1.2	0.0	2,924
20-24	25.3	17.8	13.4	2.5	3.2	3.4	0.1	0.0	0.2	0.1	0.0	0.1	14.3	5.7	11.4	0.9	2,299
25-29	52.1	37.9	28.1	6.2	6.8	8.1	2.5	0.0	0.6	0.3	0.0	0.5	32.4	14.7	25.3	1.5	2,209
30-34	66.2	52.0	36.5	8.5	6.5	13.8	7.5	0.0	1.1	0.5	0.0	0.3	42.6	23.4	32.6	2.8	2,058
35-39	69.9	54.1	35.9	9.3	5.8	13.9	13.6	0.1	1.5	0.3	0.1	0.5	44.2	28.1	30.2	3.4	1,842
40-44	63.8	49.3	30.6	7.5	4.5	16.8	17.3	0.3	1.3	0.9	0.5	0.7	40.6	26.2	28.8	3.2	1,480
45-49	56.8	42.4	25.3	7.2	2.0	15.7	15.3	0.7	0.9	0.8	0.0	0.3	36.5	22.7	26.0	3.8	1,170
Total	43.4	32.8	22.4	5.3	4.0	8.8	6.4	0.1	0.7	0.3	0.1	0.3	27.2	15.2	20.1	1.9	13,983
<b>CURRENTLY MARRIED WOMEN</b>																	
15-19	28.6	19.5	14.5	2.9	4.0	2.1	0.0	0.0	0.3	0.0	0.0	0.3	16.3	4.4	14.1	0.6	244
20-24	57.7	40.6	30.9	5.9	7.1	7.2	0.2	0.0	0.3	0.3	0.1	0.2	32.5	12.9	25.9	1.6	967
25-29	70.2	50.9	37.6	8.6	9.3	11.1	3.3	0.0	0.7	0.5	0.1	0.7	44.4	20.1	34.9	2.1	1,585
30-34	75.7	59.7	41.5	9.7	7.5	15.9	8.8	0.0	1.3	0.6	0.0	0.4	49.2	27.1	37.5	3.2	1,730
35-39	76.6	59.6	39.8	10.3	6.4	15.3	14.7	0.1	1.7	0.3	0.1	0.6	48.8	30.7	33.2	3.8	1,602
40-44	71.2	54.4	33.9	8.2	5.2	18.7	19.9	0.4	1.6	1.0	0.6	0.8	46.3	29.8	33.1	3.8	1,243
45-49	64.0	48.3	28.4	8.5	2.3	18.4	17.5	0.8	1.1	1.0	0.0	0.4	41.2	25.9	29.6	4.2	965
Total	69.4	52.5	35.8	8.6	6.5	14.2	10.3	0.2	1.1	0.6	0.1	0.5	44.0	24.4	32.6	3.0	8,336

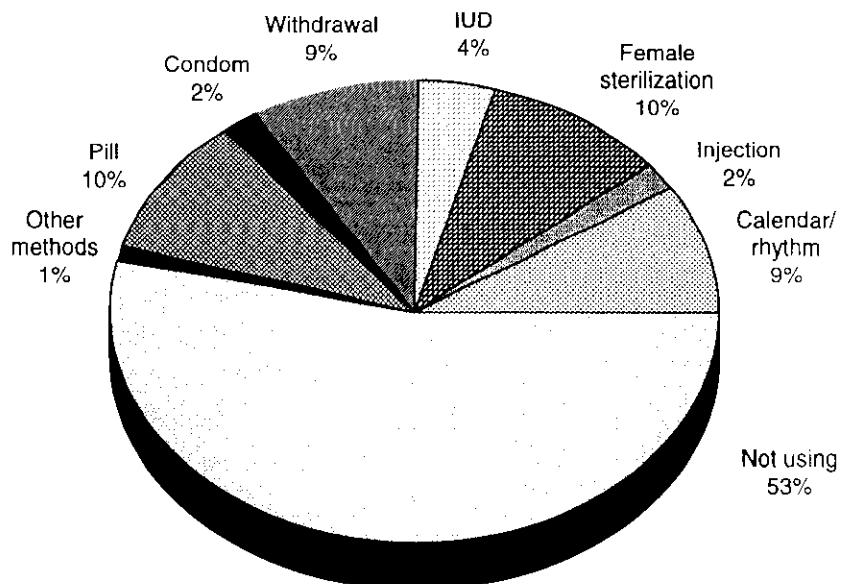
#### **4.3 Current Use of Family Planning Methods**

The level of current use of contraception is the most widely used and valuable measure of the success of the Philippine Family Planning Program (PFPP). As with ever use, the information on current use is available for all women and currently married women but the analysis focuses on the latter (Table 4.4). Thus, contraceptive prevalence is defined as the proportion of married women age 15-49 years who were using some method of family planning at the survey date.

An inverted U-shaped pattern of prevalence by age is observed, which is typical of most countries. Among currently married women, a peak in use occurs at age 35-39 for any method or any traditional method and at age 30-34 years for any modern method (Table 4.4). However, as with the data on ever use, the peak occurs in different age groups for specific modern methods. As expected, permanent methods such as female sterilization are popular among older women who are more likely to have completed their families and want to stop childbearing altogether. In contrast, the use of pill is popular among the younger women who are still in their early stages of family building, peaking at age 20-29 years. Current use of calendar/rhythm/periodic abstinence is highest among married women age 35-39 years, while withdrawal is highest among those age 25-29 years.

The contraceptive prevalence rate is 47 percent; 28 percent are using modern methods and 18 percent traditional methods. Female sterilization and the pill are the most preferred methods (10 percent each). Withdrawal and calendar/rhythm rank next (9 percent each), IUD fifth (4 percent), followed by injection and condom (2 percent each). The remaining methods have fewer users, each being used by one percent or less of married women (see Figure 4.2).

**Figure 4.2  
Use of Contraception among  
Currently Married Women 15-49**



1998 NDHS

**Table 4.4 Current use of contraception by age**

Percent distribution of all women and currently married women by contraceptive method currently used, according to age, Philippines 1998

Age	Modern methods								Traditional methods					Not cur- rently using	Number of women			
	Any meth- od	Any modern method	Pill	IUD	Inject- tion	Con- dom	Female sterili- zation	Male sterili- zation	Mucus, Billings, ovula- tion	Lac- tational amenor- rhea	Any trad- itional method	Calen- dar, rhythm	Breast- feeding <sup>1</sup>	With- drawal	Other meth- ods			
<b>ALL WOMEN</b>																		
15-19	1.5	1.0	0.5	0.2	0.2	0.0	0.0	0.0	0.0	0.6	0.1	0.0	0.4	0.0	98.5	100.0	2,924	
20-24	16.2	10.1	6.6	1.4	1.3	0.6	0.1	0.0	0.0	6.1	1.6	0.3	4.3	0.0	83.8	100.0	2,299	
25-29	35.1	21.2	11.3	3.3	2.6	1.3	2.5	0.0	0.2	13.9	4.8	0.5	8.4	0.2	64.9	100.0	2,209	
30-34	44.1	27.6	11.8	4.1	2.5	1.6	7.5	0.0	0.0	16.5	8.1	0.5	7.5	0.4	55.9	100.0	2,058	
35-39	48.1	28.3	7.3	3.9	1.5	1.8	13.6	0.1	0.1	19.8	10.9	0.5	7.9	0.4	51.9	100.0	1,842	
40-44	41.4	24.8	2.1	2.0	1.5	1.3	17.3	0.3	0.4	16.6	10.2	0.1	6.0	0.3	58.6	100.0	1,480	
45-49	29.1	18.5	0.7	1.0	0.3	0.8	15.3	0.4	0.0	10.5	5.4	0.0	4.9	0.2	70.9	100.0	1,170	
Total	28.2	17.2	5.9	2.2	1.4	1.0	6.4	0.1	0.1	--	11.0	5.2	0.3	5.3	0.2	71.8	100.0	13,983
<b>CURRENTLY MARRIED WOMEN</b>																		
15-19	18.3	11.4	6.2	2.3	2.5	0.0	0.0	0.0	0.3	6.9	1.6	0.0	5.3	0.0	81.7	100.0	244	
20-24	37.4	23.5	15.6	3.4	3.2	1.0	0.2	0.0	0.1	13.9	3.4	0.4	10.0	0.1	62.6	100.0	967	
25-29	48.6	29.3	15.7	4.6	3.5	1.8	3.3	0.0	0.2	19.3	6.7	0.7	11.7	0.2	51.4	100.0	1,585	
30-34	52.1	32.5	13.9	4.8	3.0	1.9	8.8	0.0	0.0	19.6	9.6	0.6	8.9	0.4	47.9	100.0	1,730	
35-39	54.1	31.6	8.4	4.5	1.7	2.1	14.7	0.1	0.1	22.5	12.4	0.6	9.0	0.5	45.9	100.0	1,602	
40-44	48.6	28.8	2.4	2.3	1.7	1.6	19.9	0.3	0.5	19.8	12.1	0.1	7.1	0.4	51.4	100.0	1,243	
45-49	34.3	21.5	0.8	1.3	0.4	0.9	17.5	0.5	0.0	12.8	6.6	0.0	5.9	0.3	65.7	100.0	965	
Total	46.5	28.2	9.9	3.7	2.4	1.6	10.3	0.1	0.2	--	18.3	8.7	0.5	8.9	0.3	53.5	100.0	8,336

<sup>1</sup>Includes only those women who spontaneously mentioned breastfeeding as a method of family planning and said they are currently using it as a method.

-- = Less than 0.05 percent

A review of survey results over the past three decades reveals that the percentage using contraceptives at the time of the interview among women of childbearing age increased from 15 percent in 1968 to 48 percent in 1996. In 1997, it declined slightly to 47 percent and remained at this level until 1998 (see Table 4.5 and Figure 4.3). The use of modern contraception increased steadily from 3 percent in 1968 to 22 percent in 1988, and further to 31 percent in 1997, before declining slightly to 28 percent in 1998. The increase between 1968 and 1988 is mainly due to a significant rise in the percentage of sterilized women from less than 1 percent in 1968 to 11 percent in 1988. On the other hand, the use of traditional methods increased from 7 percent in 1973 to its peak at 21 percent in 1978. It subsequently declined to 15 percent in 1993, and then rose to a level of 18 percent in 1998.

**Table 4.5 Trends in contraceptive use**

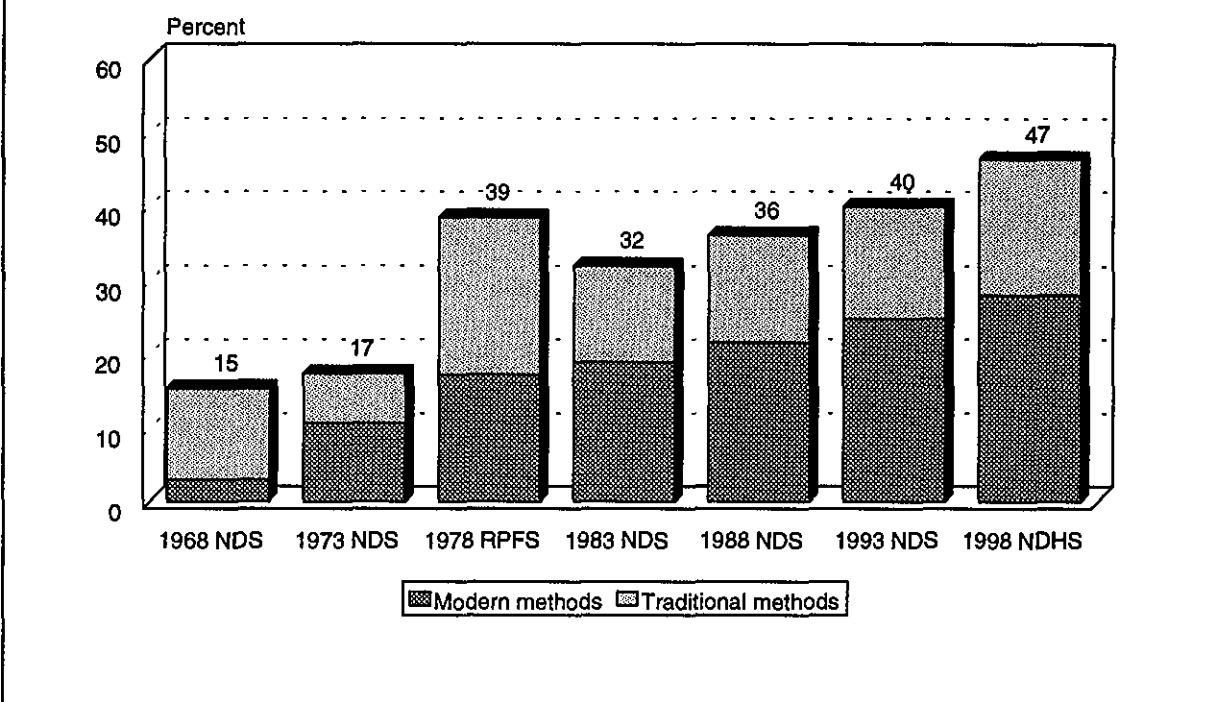
Percentage of currently married women 15-44 using modern contraceptive methods and traditional methods, Philippines, 1968-1998

Survey		Modern methods	Traditional methods	Total
1968	National Demographic Survey	2.9	11.5	15.4
1973	National Demographic Survey	10.7	6.7	17.4
1978	Republic of the Philippines Fertility Survey	17.2	21.3	38.5
1983	National Demographic Survey	18.9	13.1	32.0
1988	National Demographic Survey	21.6	14.5	36.1
1993	National Demographic Survey <sup>1</sup>	24.9	15.1	40.0
1996	Family Planning Survey <sup>1</sup>	30.2	17.9	48.1
1997	Family Planning Survey <sup>1</sup>	30.9	16.1	47.0
1998	National Demographic and Health Survey <sup>1</sup>	28.2	18.3	46.5

Sources: World Bank, 1991; NSO, 1996; NSO, 1997; NSO and Macro International, 1994

<sup>1</sup>Based on currently married women 15-49

**Figure 4.3**  
**Trends in Contraceptive Use**  
**Philippines 1968-1998**



The level of current contraceptive use is higher in urban areas (51 percent) than in rural areas (42 percent). Among urban women, female sterilization (13 percent) is the most popular method, followed by the pill (11 percent), whereas among rural women, the most commonly used methods are the pill (9 percent), withdrawal (8 percent), and calendar/rhythm/periodic abstinence (8 percent) (Table 4.6).

Differentials in current contraceptive use among the 16 administrative regions of the country are large. The use of any contraceptive method is highest in Central Luzon (55 percent), Southern Mindanao (55 percent) and Northern Mindanao (54 percent), while Autonomous Region of Muslim Mindanao (ARMM) manifests the lowest use (16 percent). However, when current use of any modern method is examined, Cagayan Valley ranks first (39 percent), followed by Southern Mindanao (36 percent) and Central Luzon (35 percent). ARMM registers the lowest level of current use of modern methods (9 percent). The ranking changes with the current use of any traditional method with Central Visayas showing the highest level (23 percent) and ARMM the lowest (7 percent). The top ranking regions when pill use is considered are Cagayan Valley and Western Mindanao (16 percent each), and for female sterilization they are Central Luzon (19 percent) and Cordillera Administrative Region (15 percent).

Table 4.6 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to selected background characteristics, Philippines 1998

Background characteristic	Any method	Any modern method	Modern methods						Traditional methods						Not currently using	Number of women	
			Pill	IUD	Injection	Condom	Female sterilization	Male sterilization	Mucus, Billings, ovulation	Lactational amenorrhea	Any traditional-method	Calendar rhythm	Breast-feeding <sup>1</sup>	Withdrawal	Other-methods		
<b>Residence</b>																	
Urban	50.7	31.3	10.7	3.4	2.3	1.9	12.6	0.1	0.2	0.1	19.4	9.3	0.5	9.3	0.2	49.3	100.0
Rural	42.2	25.0	9.1	4.0	2.4	1.3	7.9	0.2	0.1	0.0	17.2	8.0	0.4	8.4	0.4	57.8	100.0
<b>Region</b>																	
Metro Manila	49.4	28.7	10.6	1.7	0.6	3.1	12.4	0.0	0.1	0.1	20.7	10.1	0.9	9.6	0.1	50.6	100.0
Cordillera Admin.	42.0	30.6	7.0	2.3	3.9	2.3	14.8	0.3	0.0	0.0	11.4	4.4	0.0	6.7	0.3	58.0	100.0
Ilocos	43.2	28.6	10.1	1.4	2.6	0.9	13.4	0.2	0.0	0.0	14.6	3.3	0.2	11.0	0.0	56.8	100.0
Cagayan Valley	48.3	38.8	16.4	5.1	4.5	0.0	12.3	0.2	0.0	0.2	9.4	3.1	0.4	6.0	0.0	51.7	100.0
C. Luzon	54.8	35.1	12.1	0.7	2.0	1.0	19.3	0.0	0.0	0.0	19.7	6.4	0.0	13.1	0.2	45.2	100.0
S. Tagalog	45.0	26.6	7.9	2.9	2.5	1.3	11.9	0.0	0.1	0.0	18.4	5.6	0.4	12.4	0.0	55.0	100.0
Bicol	36.3	19.3	8.1	2.8	1.0	1.2	5.5	0.2	0.6	0.0	17.1	6.3	0.6	9.0	1.2	63.7	100.0
W. Visayas	45.0	25.5	8.5	2.6	3.0	1.5	8.7	0.6	0.4	0.2	19.5	11.7	0.6	7.0	0.2	55.0	100.0
C. Visayas	51.5	28.1	7.6	6.7	3.2	3.2	6.7	0.5	0.0	0.0	23.4	14.9	0.7	7.8	0.0	48.5	100.0
E. Visayas	37.5	16.7	4.4	1.8	1.8	1.1	7.3	0.2	0.2	0.0	20.7	10.4	0.0	9.8	0.5	62.5	100.0
W. Mindanao	43.8	30.0	15.7	6.0	2.1	1.7	4.1	0.0	0.3	0.0	13.8	9.7	0.5	3.2	0.5	56.2	100.0
N. Mindanao	54.0	33.9	13.8	10.0	3.1	1.3	5.2	0.0	0.4	0.0	20.1	12.6	0.0	7.5	0.0	46.0	100.0
S. Mindanao	55.2	35.8	14.4	9.4	3.4	1.5	6.9	0.0	0.2	0.0	19.4	12.6	0.0	6.2	0.5	44.8	100.0
C. Mindanao	45.2	28.5	8.0	7.3	3.4	0.9	8.7	0.2	0.0	0.0	16.7	10.3	0.0	5.7	0.7	54.8	100.0
ARMM	15.8	8.7	3.6	0.2	1.9	0.0	3.0	0.0	0.0	0.0	7.2	1.7	1.9	0.8	2.8	84.2	100.0
Caraga	48.8	28.7	8.8	6.9	4.1	1.3	7.5	0.2	0.0	0.0	20.1	12.4	1.1	6.2	0.4	51.2	100.0
<b>Education</b>																	
No education	15.3	9.3	1.3	0.7	2.1	0.9	4.3	0.0	0.0	0.0	6.0	1.9	0.6	2.2	1.4	84.7	100.0
Elementary	41.1	25.4	8.6	2.9	2.3	1.1	10.2	0.3	0.1	0.0	15.7	6.1	0.5	8.6	0.4	58.9	100.0
High school	50.2	30.5	11.7	4.5	2.7	1.5	9.8	0.1	0.1	0.1	19.7	8.4	0.6	10.5	0.3	49.8	100.0
College or higher	50.3	29.9	9.8	3.8	2.0	2.4	11.5	0.1	0.3	0.1	20.4	12.5	0.2	7.6	0.2	49.7	100.0
<b>Number of children</b>																	
None	3.1	0.9	0.6	0.0	0.2	0.2	0.0	0.0	0.0	0.0	2.2	0.7	0.0	1.5	0.0	96.9	100.0
1	35.5	18.2	11.7	3.4	1.4	0.8	0.9	0.0	0.1	0.0	17.2	7.2	0.3	9.7	0.1	64.5	100.0
2	52.1	30.3	14.1	4.3	3.7	1.9	6.0	0.2	0.2	0.0	21.8	10.0	0.3	11.2	0.3	47.9	100.0
3	59.0	40.1	12.5	4.3	2.2	2.5	18.4	0.2	0.0	0.1	18.8	8.7	0.6	9.1	0.4	41.0	100.0
4+	49.8	30.2	7.2	3.8	2.6	1.6	14.5	0.1	0.3	0.1	19.6	10.1	0.6	8.4	0.5	50.2	100.0
Total	46.5	28.2	9.9	3.7	2.4	1.6	10.3	0.1	0.2	0.0	18.3	8.7	0.5	8.9	0.3	53.5	100.0
<sup>1</sup> Includes only those women who spontaneously mentioned breastfeeding as a method of family planning and said they are currently using it as a method.																	

Current contraceptive use differs by level of education. Only 15 percent of married women with no formal education are currently using a method, compared with 41 percent of women with at most some elementary education, and 50 percent of those with at least some secondary education or higher. Among women with no education or only some elementary schooling, female sterilization is the most widely used method, followed by withdrawal. Among women with some secondary schooling, the pill is the most widely used method, followed by withdrawal. It is interesting to note that among women who have at least some college education or higher, calendar/rhythm is the most commonly used method, followed by female sterilization.

The level of contraceptive use is also strongly related to the number of children a woman has. Only 3 percent of married women with no children are currently using a family planning method. After the first child, contraceptive use increases sharply with the number of living children, peaking at 59 percent among women with 3 children, after which it declines.

#### 4.4 Number of Children at First Use of Family Planning

In many cultures, family planning is used only when couples have already had as many children as they want. However, as the concept of family planning gains acceptance, the motivation to use family planning may either be to space births or to limit family size. Table 4.7 shows the percent distribution of ever-married women by the number of living children at the time of first use, by the respondent's age at the time of the interview. The results indicate that Filipino women are adopting family planning fairly early in the family building process although only 4 percent of ever-users began using immediately after marriage or before the first birth. Overall, about one in three women began using family planning after the first child and about one in six started using after two children.

Table 4.7 Number of children at first use of contraception

Percent distribution of ever-married women by number of living children at the time of first use of contraception, according to current age, Philippines 1998

Current age	Never used contraception	Number of living children at time of first use of contraceptive					Missing	Total	Number of women
		0	1	2	3	4+			
15-19	68.7	6.5	21.0	3.3	0.3	0.0	0.2	100.0	248
20-24	40.1	7.0	39.5	9.8	2.5	1.0	0.0	100.0	1,004
25-29	28.2	4.7	38.5	17.1	7.2	4.2	0.1	100.0	1,657
30-34	23.4	3.2	35.2	15.9	11.8	10.4	0.1	100.0	1,820
35-39	22.3	2.8	31.5	17.4	13.5	12.5	0.1	100.0	1,703
40-44	29.4	2.6	25.4	15.4	12.1	15.0	0.1	100.0	1,371
45-49	35.5	1.7	21.1	15.1	10.9	15.5	0.1	100.0	1,093
Total	29.7	3.6	32.0	15.2	9.8	9.6	0.1	100.0	8,896

The timing of first contraceptive use in terms of the number of living children varies among the different age cohorts of women. A higher percentage of younger women compared with older women started using contraception after having one child. For instance, two out of five women aged 20-24 years first used contraception after having one child, compared with one out of five women aged 45-49 years. The two age cohorts are worth noting as the 45-49 cohort has a slightly higher percentage of ever-users of contraception compared to the 20-24 cohort (64 percent versus 60 percent).

#### 4.5 Problems with Current Method

Identifying problems with the use of specific methods has practical implications for future educational and publicity campaigns. Therefore, the 1998 NDHS included a question for all current users as to whether they had experienced any problems with the method they were using and if so, what the main problem was. The results are shown in Table 4.8. Ninety percent or more of current users of the condom, female sterilization, withdrawal, and the IUD reported having no problems with the method they were currently using. A slightly lower percentage of current users of the pill (86 percent) reported the same. Of those who have had problems with their methods, side effects were generally cited as the most common problem. Health concerns were reported by a little more than one percent of the current users of the pill, IUD, female sterilization and withdrawal. It should be mentioned that this question, which asks about problems with current method, may not have elicited a full reporting of problems. Women who had serious problems are likely to have discontinued the method.

Table 4.8 Problems with current method of contraception

Percent distribution of contraceptive users by the main problem with current method, according to specific methods, Philippines 1998

Main problem	Pill	IUD	Condom	Female sterilization	Withdrawal
No problem	85.9	89.4	95.3	89.9	89.8
Husband disapproves	0.0	0.2	0.0	0.0	0.0
Side effects	12.1	7.9	2.1	8.1	8.1
Health concerns	1.2	0.8	1.4	1.4	1.5
Access/availability	0.0	0.2	0.0	0.0	0.0
Cost	0.1	0.0	0.0	0.0	0.0
Inconvenient to use	0.7	0.7	1.2	0.0	0.2
Other	0.0	0.2	0.0	0.5	0.1
Missing	0.0	0.6	0.0	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0
Number of women	831	310	138	898	742

#### 4.6 Knowledge of Fertile Period

An elementary knowledge of reproductive physiology is useful for successful practice of coitus-associated methods such as withdrawal, condom and vaginal methods. Such knowledge is particularly critical in the practice of calendar/rhythm method and natural family planning methods such as mucus/Billings/ovulation, basal body temperature, and symptothermal method. In the 1998 NDHS, women were asked during which days of a woman's menstrual cycle a woman has the greatest chance of becoming pregnant. A fifth of all women interviewed said they did not know when they are fertile during their ovulatory cycle (Table 4.9). In contrast, only a small proportion of those who have used calendar/rhythm (7 percent) did not know when a woman is most likely to get pregnant. However, only 14 percent of all women and 26 percent of ever-users of calendar/rhythm gave the "correct" response, that is, a woman's fertile period occurs in the middle of her cycle. About 33 percent of all women and 35 percent of ever-users of calendar/rhythm method said that a woman is most likely to conceive right after her period has ended. Smaller proportions reported that the least safe period is just before a woman's period begins. One-fifth of all women and 16 percent of users of calendar/rhythm reported that there is no particular time when women are at greater risk of conceiving. The findings indicate a need to further educate potential and actual users of natural family planning on the ovulatory process.

**Table 4.9 Knowledge of fertile period**

Percent distribution of all women and of women who have ever used calendar/rhythm by knowledge of the fertile period during the ovulatory cycle, Philippines 1998

Perceived fertile period	Ever-users of calendar/ rhythm	All women
During menstrual period	0.4	0.9
Right after period has ended	34.5	33.2
In the middle of the cycle	25.7	13.8
Just before period begins	3.8	5.6
Other	13.1	6.8
No particular time	15.7	19.6
Don't know	6.5	20.1
Missing	0.1	0.1
Total	100.0	100.0
Number of women	728	13,983

#### 4.7 Timing of Sterilization

In the Philippines where female sterilization is one of the most widely used methods of contraception, information about the trend in age at adoption of sterilization is very useful. To minimize problems of censoring, the median age at the time of the operation is calculated for women sterilized at less than 40 years of age. Data shown in Table 4.10 indicate that 73 percent of sterilized women had their operation at age 25-34, and 12 percent were sterilized before age 25. There is evidence that, over time, women are having the operation at older ages; the median age at sterilization is 29 for women sterilized 8-9 years ago, and 32 for women who had the operation less than 2 years ago. Overall, the median age is 30 years.

Table 4.10 Timing of sterilization

Percent distribution of sterilized women by age at the time of sterilization, according to the number of years since the operation, Philippines 1998

Years since operation	Age at time of sterilization						Total	Number of women	Median age
	<25	25-29	30-34	35-39	40-44	45-49			
<2	4.1	30.8	33.6	24.0	7.0	0.5	100.0	103	31.9
2-3	4.6	41.1	29.4	16.8	6.2	1.9	100.0	85	30.1
4-5	6.7	23.8	49.8	11.8	7.9	0.0	100.0	88	31.5
6-7	7.3	33.9	32.3	24.0	2.5	0.0	100.0	121	31.2
8-9	11.8	44.2	29.8	14.3	0.0	0.0	100.0	84	28.9
10+	18.1	45.6	31.6	4.7	0.0	0.0	100.0	417	<sup>b</sup>
Total	12.1	39.6	33.3	12.3	2.5	0.2	100.0	898	29.6

<sup>a</sup> Median age was calculated only for women less than 40 years of age to avoid problems of censoring.

<sup>b</sup> Not calculated due to censoring

#### 4.8 Willingness to Pay for Contraceptive Method Used

Slightly more than one-third (35 percent) of current users of pills obtain these free of charge (Table 4.11). Three out of ten purchase a packet of pills at less than 10 pesos, 15 percent, at 10 to 24 pesos and another 14 percent at 25 to 99 pesos. When asked how much they are willing to pay for the pills, more than half (55 percent) of pill users expressed willingness to pay between 10 and 50 pesos per packet. Around one-fifth would still purchase it at more than 50 pesos but not to exceed 99 pesos.

Of the users of injection, one-third obtain it for free, while around three-fifths pay less than 100 pesos per injection. Less than 5 percent pay 100 pesos or more. However, almost three out of ten are willing to pay 100 pesos or more per injection, one-quarter from 50 to 99 pesos, and 48 percent would rather pay less than 50 pesos.

Almost three out of ten IUD users do not pay for the method, while more than half (53 percent) pay less than 100 pesos. Surprisingly, four out of ten IUD users expressed willingness to pay for the method at 100 pesos or more. Almost half of condom users are willing to pay less than 20 pesos for a packet of condoms. This is to be expected since 28 percent obtain the method for free, while another 39 percent pay less than 10 pesos per packet.

**Table 4.11 Willingness to pay for contraceptive method used**

Percent distribution of current users of pill, injection, IUD; and condom, by cost of method and by amount willing to pay for method, Philippines 1998

Pill users			Injection users			IUD users			Condom users		
Cost	Current cost	Amount willing to pay	Cost	Current cost	Amount willing to pay	Cost	Current cost	Amount willing to pay	Cost	Current cost	Amount willing to pay
Free	35.4	-	Free	33.2	-	Free	27.1	-	Free	28.3	-
< 10 pesos	30.2	7.4	< 10 pesos	13.4	3.2	< 10 pesos	6.1	0.6	< 10 pesos	38.6	15.5
10 - 24 pesos	14.7	29.5	10 - 19 pesos	17.5	13.0	10 - 19 pesos	8.3	7.6	10 - 19 pesos	18.1	32.3
25 - 49 pesos	3.8	25.1	20 - 29 pesos	10.2	17.4	20 - 29 pesos	12.1	10.7	20 - 29 pesos	2.7	20.4
50 - 74 pesos	5.0	11.5	30 - 49 pesos	7.5	14.1	30 - 49 pesos	6.5	9.4	30 - 49 pesos	2.2	12.8
75 - 99 pesos	5.4	9.8	50 - 99 pesos	13.8	23.2	50 - 99 pesos	19.9	29.1	50 - 99 pesos	1.5	6.9
100 - 149 pesos	4.2	8.3	100 - 249 pesos	2.5	14.3	100 - 249 pesos	12.4	18.7	100 - 249 pesos	0.8	8.4
150 - 199 pesos	0.0	1.7	250 - 499 pesos	1.3	11.1	250 - 499 pesos	4.3	13.3	250 - 499 pesos	1.4	3.7
200 - 299 pesos	0.4	1.2	500 - 749 pesos	0.2	2.5	500 - 749 pesos	1.1	4.9			
300 pesos	0.1	2.3	750 - 999 pesos	0.5	0.7	750 - 999 pesos	1.1	1.3			
>300 pesos	0.4	3.0	1,000 pesos	0.0	0.5	1,000 pesos	0.0	3.9			
Don't know/missing	0.5	0.2	Don't know/missing	0.0	0.0	Don't know/missing	1.2	0.6	Don't know/missing	6.4	0.0
Total	100.0	100.0									
Mean	19.6	51.5	Mean	28.0	85.1	Mean	65.8	146.1	Mean	13.0	32.3
No. of users	831	831	No. of users	198	198	No. of users	310	310	No. of users	138	138

Note: Cost refers to the cost per packet of pills, per injection, and per packet of condoms; IUD cost includes cost of insertion.

#### 4.9 Source of Supply of Modern Contraceptive Methods Currently Used

Information on sources of modern contraceptives currently used is useful for family planning program managers and implementors. The public sector (Table 4.12) emerges as the main source for a large majority of current users (72 percent) of modern contraceptives. In fact, about nine in 10 users of injection, four in five users of IUD, and three in four users of the pill obtained their methods from government sources. While government hospitals are the main source of female sterilization, barangay health stations and urban/rural health centers are the main sources for the pill, IUD, and injection. Pharmacies are an important source of pills and condoms.

**Table 4.12. Source of supply for modern contraceptive methods**

Percent distribution of current users of modern contraceptive methods by most recent source of supply, according to specific methods, Philippines 1998

Source of supply	Pill	IUD	Injection	Condom	Female sterilization	Total
<b>Public sector</b>	76.4	82.4	92.0	41.4	65.6	72.0
Government hospital	1.8	10.4	3.5	0.0	54.1	22.7
Rural/urban health station	31.3	41.4	33.7	17.4	7.1	22.7
Barangay health station	38.6	28.3	53.0	21.9	3.3	23.9
Barangay supply office	4.3	0.6	1.3	1.0	0.3	1.9
Other public	0.4	1.7	0.4	1.0	0.9	0.8
<b>Medical private</b>	22.7	15.8	7.5	54.1	32.7	26.3
Private hospital/clinic	3.2	13.4	5.7	3.0	30.8	15.4
Private doctor	2.6	1.8	1.3	0.0	1.6	1.9
Private nurse/midwife	0.4	0.4	0.5	0.0	0.1	0.3
Pharmacy	15.5	0.2	0.0	47.2	0.0	8.1
Store	0.6	0.0	0.0	2.4	0.0	0.4
NGO	0.1	0.0	0.0	0.0	0.0	0.1
Industry based clinic	0.3	0.0	0.0	1.4	0.0	0.2
<b>Other private</b>	0.9	1.2	0.5	4.5	1.1	1.4
Puericulture center	0.1	1.2	0.0	0.0	0.4	0.3
Church	0.0	0.0	0.0	0.0	0.6	0.3
Friends/relatives	0.8	0.0	0.5	3.8	0.1	0.7
Other	0.0	0.0	0.0	0.7	0.1	0.1
<b>Don't know</b>	0.0	0.0	0.0	0.0	0.3	0.1
<b>Missing</b>	0.0	0.6	0.0	0.0	0.2	0.2
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of women</b>	831	310	198	138	898	2,403

Note: Total includes 12 users of male sterilization, 13 users of mucus/Billings/ovulation method and 4 LAM users.

Aside from the type of source, information on the length of time needed to reach the source from home was obtained for women who are currently using a modern contraceptive method. Table 4.13 shows the relevant information by urban-rural residence for current users of modern contraceptives. Among current users of modern contraceptives, the median time to reach a source is 30 minutes. The same length of time holds true for rural users, while urban users need about 20 minutes, on average.

Table 4.13 Time to source of supply for modern contraceptive methods

Percent distribution of women who are currently using a modern contraceptive method by time (minutes) to reach a source of supply, according to urban-rural residence, Philippines 1998

Time (minutes) to source	Women who are currently using a modern method		
	Urban	Rural	Total
0-14	37.4	26.4	32.7
15-29	17.3	15.2	16.4
30-59	22.9	25.1	23.8
60+	21.5	32.8	26.4
Don't know time	0.4	0.3	0.4
Don't know source	0.2	0.0	0.1
Not stated	0.2	0.2	0.2
Total	100.0	100.0	100.0
Median time to source	20.2	30.4	30.0
Number of women	1,363	1,040	2,403

#### 4.10 Contraceptive Discontinuation Rates

Population program managers are greatly interested in fostering improvements in the quality of contraceptive practice. One means of assessing the quality of contraceptive practice is to look at the contraceptive discontinuation rates which represent the proportion of users who discontinued the use of a method within 12 months after the start of use. (For a technical discussion on the methodology of calculating this measure see Macro International, 1992). Table 4.14 shows the contraceptive discontinuation rates due to various reasons for selected contraceptive methods. The results show that overall, two in five users discontinue during the first year of use. The discontinuation rate is highest for condom (60 percent), followed by injection (52 percent), withdrawal (46 percent), and the pill (44 percent). The IUD has the lowest discontinuation rate—14 percent (see Figure 4.4). Withdrawal and calendar/rhythm show higher failure rates than the other methods; 22 percent of withdrawal users and 18 percent of the users of calendar/rhythm become pregnant within a year after starting the method. Side effects/health reasons are cited as the main causes for discontinuing use of injections (32 percent) and the pill (18 percent).

“Other reasons” is an important category for condom. These include method-related reasons such as desire for a more effective method, inconvenience and disapproval of the respondent’s husband.

Table 4.14 First-year discontinuation rates for contraception

Proportion of contraceptive users who discontinued use of a method by 12 months after beginning the method, due to method failure, desire to become pregnant, or other reason, according to specific methods, Philippines 1998

Method	Reason for discontinuing contraceptive method				
	Method failure	Desire to become pregnant	Side effects/ Health concerns	All other reasons	All reasons
Pill	5.4	4.5	17.7	16.2	43.8
IUD	1.1	0.6	7.8	4.8	14.3
Injection	1.9	2.2	31.8	15.9	51.8
Condom	8.5	2.4	5.5	43.7	60.1
Calendar, rhythm	18.4	4.9	1.2	11.3	35.9
Withdrawal	22.4	5.0	4.5	13.8	45.7
All methods	12.0	4.1	9.8	15.2	41.1

Note: Figures are based on life-table calculations.

**Figure 4.4**  
**Contraceptive Discontinuation Rates**  
**for First Year of Use**

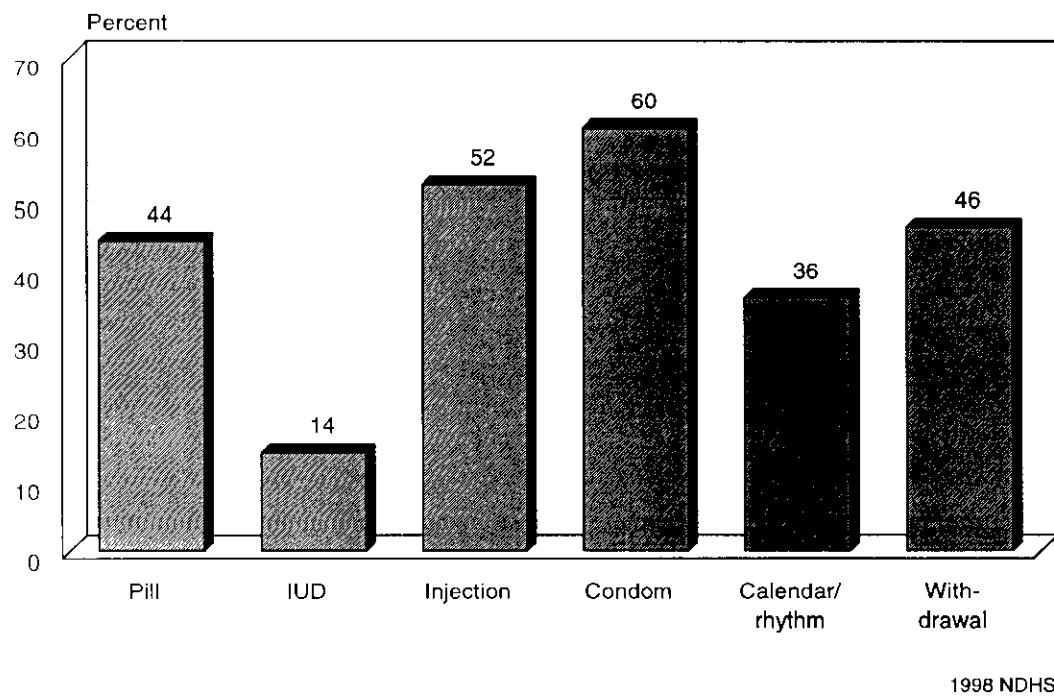


Table 4.15 presents reasons for discontinuation among ever users who have discontinued use of a method during the five years preceding the survey. Considering all methods, accidental pregnancy stands out as the most important reason of stopping use of contraception. Side effects ranks second (16 percent) and desire for pregnancy is third (15 percent). Manipulable program variables, such as access/availability and cost of methods, are minor reasons for discontinuing use of any method. Looking at specific methods, the most common reason for discontinuing use of the pill, IUD and injection is side effects, while method failure is reported by users of withdrawal and calendar/rhythm. Method failure accounts for about half of the discontinuations of traditional methods. More users of condom discontinue use due to inconvenience than for any other reason.

**Table 4.15 Reasons for discontinuing of contraception**

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason for discontinuation, according to specific methods, Philippines 1998

Reason for discontinuation	Modern method discontinued				Traditional method discontinued				Total
	Pill	IUD	Injection	Condom	Calendar rhythm	Withdrawal	Other		
Became pregnant	13.0	6.4	2.4	16.7	50.7	52.5	28.1		31.4
To become pregnant	17.0	20.3	5.9	8.1	19.4	12.4	17.3		15.1
Husband disapproved	0.8	0.9	3.0	9.8	1.9	3.3	2.2		2.5
Side effects	28.1	36.0	44.6	6.6	1.0	5.3	3.2		15.5
Health concerns	8.6	13.7	14.8	3.0	1.6	2.6	4.5		5.6
Access/availability	1.6	0.2	2.7	1.1	0.2	0.0	1.7		0.8
More effective method	2.0	4.8	3.4	6.3	7.9	8.1	9.7		5.6
Inconvenient to use	2.6	5.8	1.9	27.3	2.5	2.3	3.7		4.3
Infrequent sex	11.3	1.4	4.1	8.1	3.4	3.1	0.9		6.0
Cost	0.3	0.0	1.4	0.4	0.0	0.0	2.6		0.3
Fatalistic	0.0	0.0	0.2	0.0	0.0	0.0	0.0		0.0
Menopause	0.2	0.3	0.0	0.7	1.0	0.4	2.2		0.5
Marital dissolution	0.5	0.9	0.1	1.0	0.4	0.3	0.0		0.4
Other	8.2	5.6	6.7	5.2	3.5	2.3	14.1		5.4
Don't know	0.7	0.5	0.9	0.3	0.7	0.2	2.1		0.6
Missing	5.3	3.1	7.8	5.6	5.7	7.1	7.6		6.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
Number of women	1,295	179	275	287	876	1,130	110		4,152

#### 4.11 Intentions for Future Family Planning Use among Nonusers

Intention to use contraception in the future provides a forecast of potential demand for services, and acts as a convenient summary indicator of disposition towards contraception among current nonusers. Intention not to use contraception in the future is useful in identifying “hard core” targets for program managers and implementors. Among currently married nonusers, 54 percent do not intend to use a family planning method in the future (Table 4.16). One in three nonusers indicated their intent to use a contraceptive method in the next 12 months, while 8 percent said they will use it later. Among currently married nonusers with no living children, a much lower percentage (13 percent) intend to use a method in the next 12 months but 24 percent of them said they will use it later.

**Table 4.16 Future use of contraception**

Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Philippines 1998

Future intention	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use in next 12 months	12.5	31.3	39.0	37.0	33.1	32.8
Intends to use later	23.5	13.3	7.3	6.6	2.6	8.0
Unsure as to timing	0.9	0.9	0.6	0.7	1.0	0.8
Unsure as to intention	6.4	5.0	4.2	3.3	2.8	3.9
Does not intend to use	56.8	48.9	48.4	52.0	59.7	53.9
Missing	0.0	0.6	0.6	0.3	0.9	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	361	877	829	695	1,588	4,351

<sup>1</sup>Includes current pregnancy

One-fifth of married nonusers who say they do not intend to use family planning cited desire for pregnancy as the main reason for not using a method. A slightly lower percentage (18 percent) say that they fear side effects (Table 4.17). Other often cited reasons are "menopausal/had hysterectomy" (14 percent) and health concerns (14 percent). Small proportions (6 percent or less) of nonusers cited "husband opposed" (6 percent), "opposed to family planning" (5 percent), religion (5 percent) and "older age, difficulty in becoming pregnant, infrequent sex and husband away" (5 percent) as reasons for not using contraception. Desire for more children, side effects and health concerns are reported more often by women under 30 than older women as the reason for not using contraception.

Presented in Table 4.18 is the distribution of married nonusers who intend to use in the future by their preferred method. Two out of five nonusers who intend to use family planning in the future prefer to use the pill, 13 percent want to use calendar/rhythm/periodic abstinence, 12 percent want to use injection, 9 percent prefer to use IUD and another 9 percent, female sterilization. A larger percentage of women who intend to use contraception within the next 12 months prefer to use the IUD, injection, and female sterilization than those who want to use contraception after 12 months.

**Table 4.17 Reasons for not using contraception**

Percent distribution of currently married women who are not using a contraceptive method and who do not intend to use in the future by main reason for not using, according to age, Philippines 1998

Reason for not using Contraception	Age		
	<30	30+	Total
Wants more children	26.7	18.8	20.4
Respondent opposed	4.0	5.0	4.8
Husband opposed	8.8	4.6	5.5
Others opposed	0.4	0.2	0.2
Religion	6.1	4.4	4.8
Knows no method	2.4	1.0	1.3
Knows no source	0.1	0.2	0.2
Costs too much	0.1	0.4	0.4
Side effects	25.3	15.6	17.5
Lack of access	0.7	0.1	0.2
Inconvenient	1.1	1.0	1.0
Interfere with body	0.8	1.0	1.0
Health concerns	15.3	13.4	13.8
Old/difficult to get pregnant/infrequent sex/husband away	3.0	5.3	4.8
Menopausal/had hysterectomy	0.5	17.9	14.4
Subfecund, infecund	0.6	4.0	3.4
Other	2.2	6.6	5.8
Don't know/missing	1.8	0.4	0.7
Total	100.0	100.0	100.0
Number of women	468	1,877	2,345

**Table 4.18 Preferred method of contraception for future use**

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 whether they intend to use in the next 12 months or later, Philippines 1998

Preferred method of contraception	Intend to use		
	In next 12 months	After 12 months	Total
Pill	39.0	44.2	40.0
IUD	10.6	5.0	9.3
Injection	12.2	8.3	11.7
Condom	2.2	6.5	3.0
Female sterilization	9.4	5.7	8.7
Male sterilization	0.1	0.0	0.1
Calendar/ rhythm/periodic abstinence	11.9	16.0	12.8
Mucus/ Billings/ ovulation	0.1	0.1	0.1
Basal body temperature	0.1	0.5	0.2
Symptothermal	0.1	0.2	0.1
Lactational amenorrhea	0.3	0.0	0.2
Breastfeeding	0.4	0.7	0.6
Withdrawal	7.2	7.5	7.1
Other	2.4	1.2	2.1
Unsure	4.1	3.8	4.0
Total	100.0	100.0	100.0
Number of women	1,426	349	1,811

Note: Total includes 36 women unsure as to timing of intended use.

#### **4.12 Family Planning Messages in the Mass Media**

In the Philippine Family Planning Program, the Department of Health and Commission on Population are working hand in hand with other government and private agencies in implementing the Information, Education, Communication and Motivation (IECM) component. For example, given the high level of awareness about family planning, the focuses of the Department of Health's efforts in IECM are (Department of Health, 1990):

1. correcting misinformation about the Program emanating from various sources;
2. reiteration and specifying the health benefits of family planning and the link of family planning services with other health services;
3. providing the informational basis for expanded choice; and
4. supporting any selection among legally and medically accepted choices with necessary information (as part of the service to assist that choice).

One of the channels of IECM relates to the mass media, which includes radio, television, newspaper/magazine, posters and leaflets/brochures. During the few months prior to the survey, 67 percent of all women had heard about family planning on the radio, while 71 percent had seen it on television (Table 4.19). Less than half had read about family planning in a newspaper/magazine (44 percent), a poster (44 percent), or leaflet/brochure (34 percent). Women, irrespective of age and residence mainly hear about family planning from a radio or a television. A higher percentage of younger women than older women and of urban women compared with rural women had seen a family planning message on television. Moreover, urban women are more likely to see a message in a newspaper/magazine, poster and leaflet/brochure compared with women in rural areas.

The role of mass media as a channel for communicating family planning to the public is least important in the Autonomous Region of Muslim Mindanao (ARMM). Metropolitan Manila leads all regions in the level of family planning communication through television, newspaper/magazine and leaflet/brochure while Southern Mindanao leads in communications through posters. With radio as the source of family planning messages, Caraga tops the list (79 percent), and Ilocos, Northern Mindanao, Central Mindanao, and Western Mindanao rank second, third, fourth and fifth, respectively.

Generally, more highly educated women are more likely to hear or see family planning messages from the different media of communication. Five in six women with some college education had heard a family planning message on television in the few months before the survey, compared with only one in six women with no formal education.

**Table 4.19 Exposure to family planning messages in the mass media**

Percentage of women who received a message about family planning through the mass media a few months prior to the survey, by selected background characteristics, Philippines 1998

Background characteristic	Exposure to family planning message in the media					Number of women
	Radio	Television	Newspaper/magazine	Poster	Leaflet/brochure	
<b>Age</b>						
15-19	65.1	72.7	39.8	39.8	28.1	2,924
20-24	67.6	73.9	48.9	46.0	36.6	2,299
25-29	68.1	71.0	44.5	45.9	35.7	2,209
30-34	68.6	71.9	44.2	45.7	34.7	2,058
35-39	70.9	69.3	46.3	45.6	36.5	1,842
40-44	66.2	67.5	44.6	46.8	39.5	1,480
45-49	65.6	64.0	43.8	42.5	33.7	1,170
<b>Residence</b>						
Urban	67.9	81.7	52.3	49.5	39.5	7,911
Rural	66.7	56.5	34.0	37.7	27.8	6,072
<b>Region</b>						
Metro Manila	67.7	89.2	56.8	51.1	44.6	2,818
Cordillera Admin.	57.0	42.3	43.8	44.7	36.8	207
Ilocos	75.7	77.3	47.1	39.6	27.5	689
Cagayan valley	70.2	58.0	42.0	43.1	35.7	474
C.Luzon	65.0	77.6	47.1	40.5	27.4	1,414
S.Tagalog	70.5	77.4	46.6	40.1	30.0	1,917
Bicol	63.9	54.1	34.5	42.4	32.9	703
W.Visayas	66.3	64.1	43.5	51.1	39.3	1,045
C.Visayas	70.3	64.4	38.8	46.8	37.7	1,093
E.Visayas	66.2	52.3	33.0	36.6	25.6	553
W.Mindanao	71.4	51.9	33.3	31.4	21.9	530
N.Mindanao	73.2	65.8	40.8	49.9	37.6	482
S.Mindanao	63.2	70.9	41.1	54.2	37.6	925
C.Mindanao	71.7	69.2	40.5	43.3	32.7	425
ARMM	32.1	23.7	14.7	15.8	13.8	385
Caraga	79.0	71.6	44.4	47.3	39.0	323
<b>Education</b>						
No education	30.9	16.1	2.7	4.4	4.0	217
Elementary	64.5	53.5	26.4	27.8	19.7	3,664
High school	68.8	74.4	43.0	44.3	31.7	5,916
College or higher	69.9	83.7	64.2	61.2	52.7	4,186
Total	67.4	70.8	44.4	44.4	34.4	13,983

To determine the level of acceptance for dissemination of family planning information among Filipino women, the NDHS asked women whether they consider it acceptable to provide family planning information over the radio or television. The result shows that most respondents consider it acceptable to air family planning messages over the radio (88 percent) or television (87 percent). There is little variation by women's age. Urban women are somewhat more likely to accept family planning messages on television than rural women. Family planning messages transmitted through the radio are highly acceptable to women in Caraga, Cagayan Valley, Southern Tagalog, Western Visayas, Northern Mindanao, and Ilocos. On the other hand, family planning messages aired on television are highly acceptable in Caraga, Metropolitan Manila, and Southern Tagalog. Women in ARMM region are the least likely to accept having these messages on either medium (43 percent each). Again, more educated women are more likely to accept family planning messages on radio or television (Table 4.20).

Table 4.21 shows the percentage of women who have seen or heard the slogan of the Philippine Family Planning Program "kung sila'y mahal niyo, magplano" and the distribution of these women according to what they think is the meaning of the slogan. Sixty-six percent of women have heard or seen the slogan. The level of awareness of women about the slogan varies slightly by age. More than 85 percent of women in each age group said that the slogan is about practicing family planning, while 5 percent indicated that it is about using contraception. Seven in ten urban women have heard or seen the slogan compared with about six in ten women in rural areas. For both urban and rural women, the slogan is widely conceived as encouraging people to practice family planning.

More than 70 percent of women in Western Visayas, Caraga, Ilocos Region, Bicol Region, and Metropolitan Manila, have heard or seen the slogan. ARMM shows the lowest level of awareness of the slogan. Again, the majority of women in all regions indicated that the slogan means to practice family planning. Central Visayas shows the highest percentage (13 percent) of women indicating that it means using contraception. Three out of ten women in Eastern Visayas provided other interpretations. The level of awareness of the slogan is lowest among women with no education, and it increases with the level of education. Four in five women with college education or higher have heard or seen the slogan. One-third of women who did not go to school reported meanings pertaining neither to family planning or contraception.

**Table 4.20 Acceptability of the use of mass media for disseminating family planning message**

Percent distribution of women by acceptability of having messages about family planning on radio or television, according to selected background characteristics, Philippines 1998

Background characteristic	Acceptability of radio message				Acceptability of TV message				Number of women
	Not acceptable	Acceptable	Don't know/missing	Total	Not acceptable	Acceptable	Don't know/missing	Total	
<b>Age</b>									
15-19	10.0	84.9	5.1	100.0	11.1	84.1	4.8	100.0	2,924
20-24	7.2	90.6	2.3	100.0	8.3	89.0	2.7	100.0	2,299
25-29	7.8	89.6	2.6	100.0	9.1	88.5	2.4	100.0	2,209
30-34	8.1	90.4	1.5	100.0	9.3	88.8	1.9	100.0	2,058
35-39	8.0	89.8	2.2	100.0	10.8	86.6	2.6	100.0	1,842
40-44	10.2	87.7	2.1	100.0	12.5	84.6	2.8	100.0	1,480
45-49	12.3	84.2	3.5	100.0	14.0	82.1	3.9	100.0	1,170
<b>Residence</b>									
Urban	7.3	89.9	2.7	100.0	7.3	90.5	2.1	100.0	7,911
Rural	10.8	86.1	3.1	100.0	14.4	81.3	4.3	100.0	6,072
<b>Region</b>									
Metro Manila	6.2	89.4	4.4	100.0	5.3	91.8	2.9	100.0	2,818
Cordillera Admin.	14.4	83.7	1.9	100.0	18.7	78.1	3.2	100.0	207
Ilocos	5.1	91.1	3.8	100.0	6.1	89.0	4.9	100.0	689
Cagayan Valley	5.3	93.4	1.3	100.0	11.3	86.1	2.6	100.0	474
C.Luzon	10.5	87.2	2.3	100.0	10.0	87.8	2.2	100.0	1,414
S.Tagalog	6.7	91.9	1.4	100.0	8.2	90.0	1.8	100.0	1,917
Bicol	7.9	89.7	2.4	100.0	9.8	87.2	3.0	100.0	703
W.Visayas	6.5	91.8	1.7	100.0	10.7	87.0	2.4	100.0	1,045
C.Visayas	10.0	88.7	1.3	100.0	13.1	84.5	2.4	100.0	1,093
E.Visayas	12.1	86.5	1.4	100.0	15.6	80.4	4.0	100.0	553
W.Mindanao	14.8	81.0	4.2	100.0	22.8	71.6	5.5	100.0	530
N.Mindanao	7.6	91.7	0.8	100.0	10.8	88.2	1.0	100.0	482
S.Mindanao	8.7	89.8	1.4	100.0	9.3	88.9	1.7	100.0	925
C.Mindanao	9.8	88.6	1.6	100.0	10.1	88.3	1.6	100.0	425
ARMM	38.0	42.7	19.3	100.0	37.2	43.0	19.9	100.0	385
Caraga	4.8	94.1	1.1	100.0	5.5	93.2	1.2	100.0	323
<b>Education</b>									
No education	35.9	42.3	21.8	100.0	41.7	35.8	22.5	100.0	217
Elementary	11.5	84.8	3.6	100.0	15.9	79.1	5.1	100.0	3,664
High school	7.8	89.5	2.7	100.0	8.7	88.7	2.5	100.0	5,916
College or higher	6.6	91.9	1.5	100.0	6.4	92.5	1.1	100.0	4,186
Total	8.9	88.3	2.9	100.0	10.4	86.5	3.1	100.0	13,983

**Table 4.21 Exposure to family planning slogan**

Percentage of women who have seen or heard the family planning slogan 'kung sila'y mahal niyo, magplano' and percentage who say that it refers to using contraception, according to background characteristics, Philippines, 1998

Background characteristic	Have seen or heard family planning slogan	Of those who have seen or heard family planning slogan, percentage who say it refers to:			Number of women
		Practice of family planning	Use of contraception	Other	
<b>Age</b>					
15-19	60.5	86.2	5.7	8.1	2,924
20-24	68.3	86.0	5.9	8.1	2,299
25-29	68.9	86.7	4.6	8.7	2,209
30-34	67.8	87.2	4.9	7.9	2,058
35-39	66.8	87.4	3.8	8.8	1,842
40-44	64.3	85.8	4.5	9.6	1,480
45-49	62.7	85.9	4.3	9.8	1,170
<b>Residence</b>					
Urban	70.1	87.8	5.3	6.9	7,911
Rural	59.8	84.5	4.3	11.2	6,072
<b>Region</b>					
Metro Manila	70.3	90.0	6.5	3.5	2,818
Cordillera Admin.	61.6	87.3	3.3	9.4	207
Ilocos	71.8	95.5	2.2	2.4	689
Cagayan Valley	59.3	95.3	2.1	2.6	474
C.Luzon	61.8	89.5	2.2	8.3	1,414
S.Tagalog	67.6	93.1	2.9	4.0	1,917
Bicol	70.7	95.3	1.7	3.0	703
W.Visayas	74.7	83.9	2.0	14.1	1,045
C.Visayas	66.9	73.9	13.4	12.7	1,093
E.Visayas	56.5	64.6	5.7	29.7	553
W.Mindanao	43.4	89.8	5.0	5.2	530
N.Mindanao	55.2	85.4	6.5	8.1	482
S.Mindanao	69.9	70.2	5.5	24.2	925
C.Mindanao	69.4	83.3	4.9	11.8	425
ARMM	31.7	86.8	8.2	5.1	385
Caraga	74.4	84.9	7.2	7.8	323
<b>Education</b>					
No education	14.7	68.8	0.0	31.2	217
Elementary	49.1	84.5	5.5	10.0	3,664
High school	66.5	86.1	5.0	8.9	5,916
College or higher	81.4	88.2	4.6	7.2	4,186
Total	65.6	86.5	4.9	8.6	13,983

## CHAPTER 5

### OTHER PROXIMATE DETERMINANTS OF FERTILITY

Addressed in this chapter are the principal factors, other than contraception, which affect woman's risk of becoming pregnant: nuptiality and sexual intercourse; postpartum amenorrhea and abstinence from sexual relations, and menopause. Marriage is a primary indicator of the exposure of women to the risk of pregnancy and, therefore, is important for the understanding of fertility. Populations in which age at marriage is low tend to be populations with early childbearing and high fertility. Trends in the age at which women marry as well as in the proportions remaining single can help explain trends in fertility.

Included also in this chapter is information on more direct measures of the beginning of exposure to pregnancy and the level of exposure: age at first sexual intercourse and the frequency of intercourse. Measures of several other proximate determinants of fertility which, like marriage and sexual intercourse, influence exposure to risk are also presented. These are the duration of postpartum amenorrhea and postpartum abstinence, and menopause.

#### 5.1 Current Marital Status

Table 5.1 shows the marital status of women at the time of the survey by age. Overall, 36 percent of women have never married, 53 percent are married, 6 percent are living together with a partner, and 4 percent are not living with a husband or a partner.

Table 5.1 Current marital status

Percent distribution of women by current marital status, according to age, Philippines 1998

Age	Marital status						Number of women	
	Never married	Married	Living together	Widowed	Divorced	Not living together		
15-19	91.5	4.8	3.6	0.0	0.0	0.1	100.0	2,924
20-24	56.3	34.5	7.6	0.1	0.0	1.5	100.0	2,299
25-29	25.0	64.3	7.5	0.4	0.1	2.7	100.0	2,209
30-34	11.5	76.9	7.2	1.8	0.0	2.6	100.0	2,058
35-39	7.5	79.7	7.3	2.2	0.0	3.3	100.0	1,842
40-44	7.4	77.5	6.4	4.8	0.0	3.9	100.0	1,480
45-49	6.6	78.3	4.1	6.9	0.2	3.8	100.0	1,170
Total	36.4	53.4	6.2	1.7	0.0	2.3	100.0	13,983

The proportion never married decreases rapidly from 92 percent among teenagers to 56 percent among women in their early twenties to 25 percent among women in their late twenties. A relatively high proportion of women (about 7 percent) remains single through their 40s. The proportion in both formal and informal unions starts well below 10 percent among teenagers, increasing rapidly to 42

percent among women 20-24 years of age, and 72 percent among women 25-29 years. This proportion reaches its peak at 87 percent among women 35-39 years and declines slightly thereafter, more as a result of marital dissolution (primarily through widowhood) than by nonmarriage.

## 5.2 Age at First Marriage

Table 5.2 presents the percentage of women who first married at selected ages and the median age at first marriage, according to current age. The table clearly shows an increase in age at marriage across cohorts. Among women age 30 or older, about 34 percent were married by age 20, while 30 percent of women aged 25-29 and only 28 percent of women aged 20-24 did so. The median age at first marriage increased by almost a year, from 21.8 years among women 45-49 years to 22.7 years among women 25-29 years. This reflects a long-standing pattern of late age at marriage among Filipino women, evidenced by the fact that around one in three women 25-49 was still single at age 25.

**Table 5.2 Age at first marriage**

Percentage of women who were first married by exact age 15, 18, 20, 22 and 25, and median age at first marriage, according to current age, Philippines 1998

Current age	Percentage of women who were first married by exact age:					Percentage who had never married	Number of women	Median age at first marriage
	15	18	20	22	25			
15-19	1.3	NA	NA	NA	NA	91.5	2,924	a
20-24	2.0	14.6	27.5	NA	NA	56.3	2,299	a
25-29	2.4	14.4	30.2	44.7	64.6	25.0	2,209	22.7
30-34	3.2	18.0	34.2	48.7	68.3	11.5	2,058	22.2
35-39	2.7	16.3	34.2	51.6	69.8	7.5	1,842	21.8
40-44	3.3	20.2	36.8	53.3	71.7	7.4	1,480	21.6
45-49	4.0	18.7	34.9	52.0	70.0	6.6	1,170	21.8
20-49	2.8	16.6	32.4	47.3	63.3	21.8	11,058	b
25-49	3.0	17.2	33.7	49.5	68.5	12.7	8,759	22.1

NA = Not applicable

a Omitted because less than 50 percent of the women in the age group x to x+4 were first married by age x

b Not calculated due to censoring

## 5.3 Median Age at First Marriage

Urban women tend to marry about two years later than rural women do. The median age at first marriage for urban women is 23 years while that for rural women is 21 years (Table 5.3 and Figure 5.1). As shown in Figure 5.2, sizeable differences in age at marriage exist by region. The median age at first marriage is highest in Metropolitan Manila (24 years). There is no distinct pattern in age at first marriage by island groups; however, the less developed regions (Cagayan Valley, Eastern Visayas, Cordillera Administrative Region and Autonomous Region in Muslim Mindanao) show lower medians (ranging from 19.9 to 20.7 years) than other areas. There is a positive relationship between age at first marriage

and level of education. The median for women with no education is 19 years, while those with high school education show a median of 22 years.

Table 5.3 Median age at first marriage

Median age at first marriage among women age 25-49 years, by current age and selected background characteristics, Philippines 1998

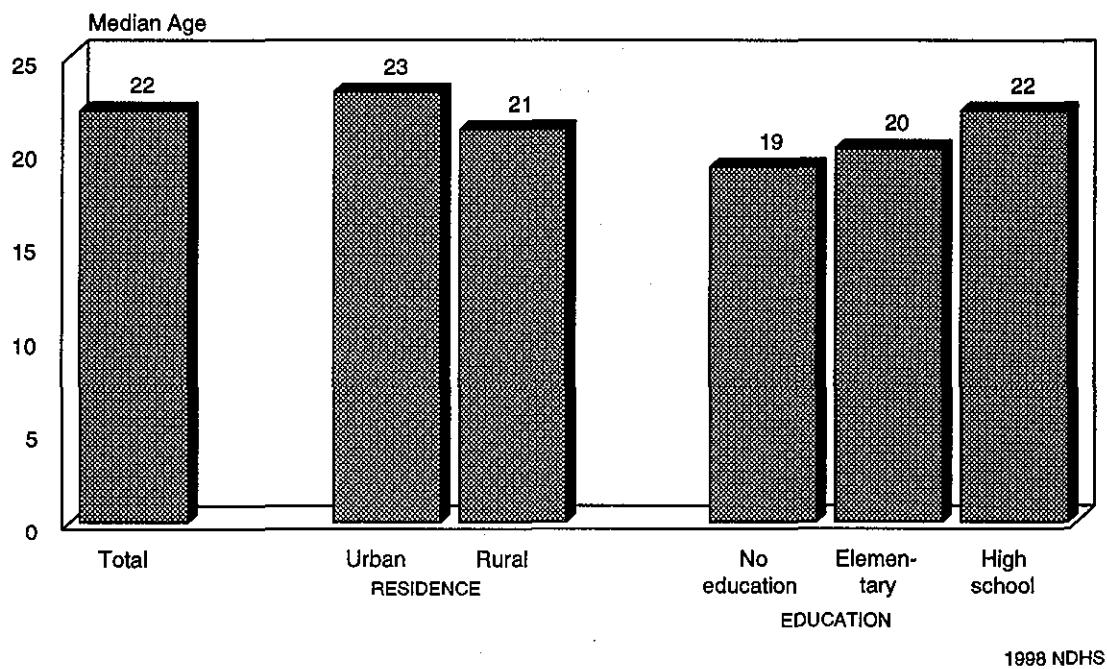
Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	24.1	23.0	22.6	22.3	22.8	23.0
Rural	21.2	21.1	21.0	20.7	20.8	21.0
<b>Region</b>						
Metro Manila	a	24.5	23.0	23.2	23.4	24.0
Cordillera Admin.	20.9	21.5	20.5	19.3	(20.8)	20.7
Ilocos	22.8	22.0	20.9	22.9	20.9	21.9
Cagayan Valley	20.3	19.6	20.3	21.2	20.2	20.3
C.Luzon	22.4	22.1	22.5	21.1	22.1	22.1
S.Tagalog	22.3	22.0	22.4	21.7	21.7	22.1
Bicol	21.6	21.7	21.9	21.2	21.3	21.5
W.Visayas	23.4	22.7	21.5	22.6	23.3	22.7
C.Visayas	23.2	22.2	22.8	21.7	23.0	22.6
E.Visayas	22.0	19.7	19.3	19.3	20.3	19.9
W.Mindanao	21.3	21.2	21.3	19.7	21.0	21.0
N.Mindanao	21.9	21.9	21.6	19.5	20.9	21.2
S.Mindanao	22.4	22.0	21.8	21.1	20.9	21.8
C.Mindanao	21.2	21.6	22.1	20.6	19.7	21.4
ARMM	20.1	19.4	19.3	20.6	20.8	20.0
Caraga	21.7	21.9	20.5	19.8	20.8	21.0
<b>Education</b>						
No education	(19.2)	(18.5)	19.1	18.0	18.9	18.7
Elementary	19.7	19.6	19.8	19.8	20.0	19.8
High school	21.8	21.4	21.3	21.4	21.8	21.5
College or higher	a	24.9	25.3	24.7	25.8	a
Total	22.7	22.2	21.8	21.6	21.8	22.1

Note: Medians are not shown for women 20-24 because less than 50 percent have married by age 20 in almost all subgroups shown in the table.

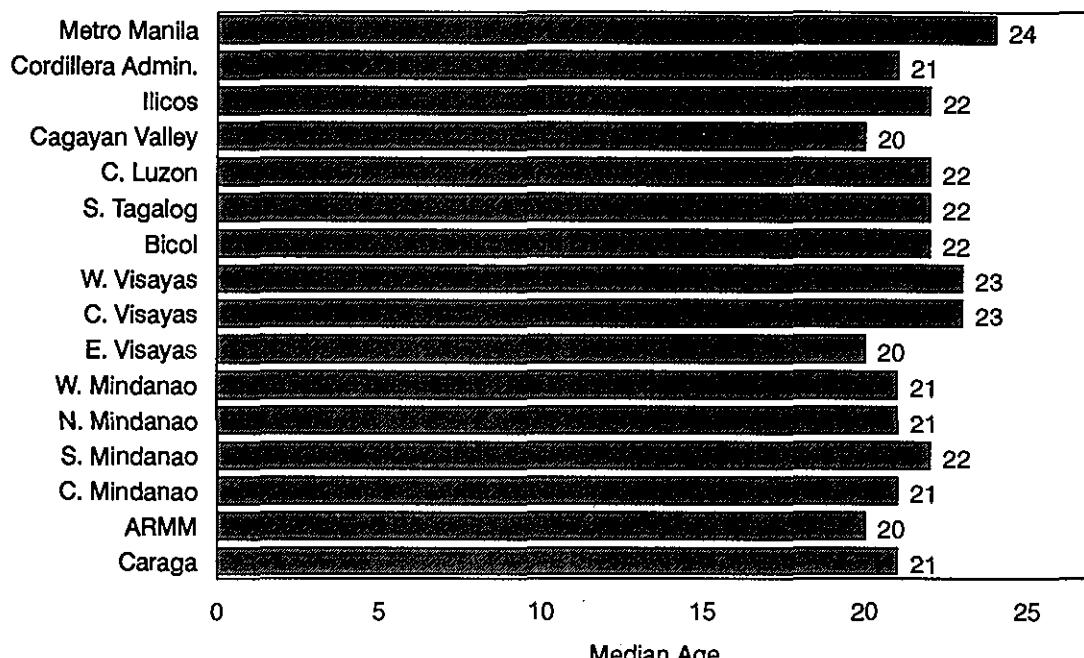
a Omitted because less than 50 percent of the women in the age group were first married by age 25.

( ) Figures in parentheses are based on 25-49 cases.

**Figure 5.1**  
**Median Age at First Marriage**  
**by Residence and Education**



**Figure 5.2**  
**Median Age at First Marriage by Region**



## 5.4 Age at First Sexual Intercourse

Like age at first marriage, age at first sexual intercourse is an indicator of the beginning of a woman's exposure to the risk of pregnancy. Table 5.4 presents information on age at first sex for all women. Overall, half of women aged 25-49 became sexually active by 22 years. Only 3 percent of women aged 25-49 years had had sexual intercourse by age 15 and 35 percent by age 20. By age 25, two out of three women have had sexual intercourse. The table shows that the age at which women became sexually active has increased somewhat over time.

Table 5.4 Age at first sexual intercourse

Percentage of women who had first sexual intercourse by exact age 15, 18, 20, 22, and 25, and median age at first intercourse, according to current age, Philippines 1998

Current age	Percentage of women who had first intercourse by exact age:					Percentage who never had inter- course	Number of women	Median age at first inter- course
	15	18	20	22	25			
15-19	1.3	NA	NA	NA	NA	90.9	2,924	a
20-24	1.8	14.8	28.7	NA	NA	54.5	2,299	a
25-29	2.1	14.3	30.7	45.1	63.4	24.0	2,209	22.8
30-34	3.1	18.1	34.8	48.0	66.7	10.9	2,058	22.3
35-39	2.5	17.7	35.8	52.3	68.2	7.4	1,842	21.7
40-44	3.0	21.1	37.0	52.9	70.1	7.2	1,480	21.6
45-49	3.6	19.3	37.0	51.9	69.4	6.3	1,170	21.7
20-49	2.6	17.1	33.4	47.6	62.4	21.0	11,059	a
25-49	2.7	17.7	34.7	49.5	67.1	12.2	8,760	22.1

NA = Not applicable

<sup>a</sup>Omitted because less than 50 percent of the women in the age group  $x$  to  $x+4$  were first married by age  $x$

Comparing the information in Table 5.4 with the information on age at first marriage in Table 5.3, it is clear that the majority of Filipino women have first sexual intercourse when they marry. There is no difference between the median age at first intercourse and first marriage among women aged 25-49 (22.1 years). Differentials in the median age at first intercourse parallel those observed for the median age at first marriage (see Table 5.5).

**Table 5.5 Median age at first intercourse**

Median age at first sexual intercourse among women age 25-49 years, by current age and selected background characteristics, Philippines 1998

Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	24.2	23.1	22.5	22.4	22.7	23.1
Rural	21.2	21.2	21.0	20.6	20.6	20.9
<b>Region</b>						
Metro Manila	a	24.5	22.8	23.4	23.4	24.1
Cordillera Admin.	21.2	21.1	20.8	18.9	(20.7)	20.7
Ilocos	23.4	22.1	21.2	23.1	20.6	21.9
Cagayan Valley	20.6	20.0	20.8	21.0	21.0	20.6
C.Luzon	22.4	22.4	22.6	21.4	21.8	22.1
S.Tagalog	22.3	22.1	22.4	21.7	21.7	22.1
Bicol	22.3	21.8	21.8	21.2	20.3	21.7
W.Visayas	23.4	22.9	21.3	22.9	23.0	22.8
C.Visayas	22.7	21.7	22.0	21.2	22.8	22.1
E.Visayas	21.6	19.8	19.4	18.7	20.4	19.9
W.Mindanao	21.6	21.7	21.0	20.1	20.3	21.0
N.Mindanao	21.6	22.1	21.0	19.5	20.5	21.1
S.Mindanao	22.2	21.8	21.2	21.1	20.6	21.5
C.Mindanao	21.5	21.5	22.5	20.7	20.0	21.5
ARMM	20.2	20.6	20.1	21.5	21.1	20.6
Caraga	21.3	21.9	20.3	20.2	20.6	20.8
<b>Education</b>						
No education	19.3	20.4	19.5	18.4	19.4	19.3
Elementary	19.7	19.7	19.7	19.8	19.8	19.7
High school	21.9	21.3	21.3	21.2	21.8	21.5
College or higher	a	24.9	25.3	24.8	26.1	a
Total	22.8	22.3	21.7	21.6	21.7	22.1

Note: Median are not shown for women 20-24 because less than 50 percent had had intercourse by age 20 in almost all subgroups shown in the table.

a Omitted because less than 50 percent of the women in age group  $x$  to  $x+4$  had had intercourse by age  $x$ .

( ) Figures in parentheses are based on 25-49 unweighted cases.

## **5.5 Recent Sexual Activity**

In the absence of contraception, the probability of pregnancy is related to participation in sexual intercourse. Thus, information on intercourse is important for refinement of measures of exposure to pregnancy. An indicator of the percentage of women who are abstaining from sex in any given month, due to such factors as a recent birth, spousal separation, illness, etc. the percentage who were not sexual active in the four weeks preceding the survey. There were several questions in the 1998 NDHS on the topic of recent sexual activity. All women were asked how long ago they had last had sexual intercourse, how many times they had sex in the last four weeks, and how many times they usually have sex in a month.

Table 5.6 is based on the question regarding on time since last intercourse and allows an assessment of the overall level of sexual activity according to age, marital duration, and other background characteristics. In general, 47 percent of women were sexually active in the month preceding the survey, 4 percent were postpartum abstaining, and 13 percent were not sexually active for reasons other than a recent birth (e.g., spousal separation, illness) although they had had sex before, while 36 percent had never had sex. The proportion postpartum abstaining declines as age and duration of marriage increase. At the same time, the proportion not sexually active for other reasons increases with increasing age and marriage duration.

The percentage of women who were sexually active in the month preceding the survey declines gradually with increasing level of education. More rural than urban women were sexually active in the four weeks preceding the survey. Women living in Metropolitan Manila showed the lowest proportion sexually active in the month before the survey (35 percent). The comparatively large proportion abstaining among Metropolitan Manila women is mainly due to factors other than a recent birth and the large proportion who have never had sex.

The proportion sexually active among contraceptive users is far higher than for nonusers. For example, 95 percent of pill users were sexually active during the month preceding the survey, compared with only 30 percent of nonusers. Among sterilization users, who tend to be older than other women, 17 percent were abstaining for reasons other than a recent birth.

## **5.6 Postpartum Amenorrhea, Abstinence, and Insusceptibility**

Among women who are not using contraception, exposure to the risk of pregnancy in the period following a birth is influenced by two factors: breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding, which can lengthen the time until the next ovulation, and by delaying the resumption of sexual relations.

**Table 5.6 Recent sexual activity**

Percent distribution of women by sexual activity in the four weeks preceding the survey and the duration of abstinence by whether or not postpartum, according to selected background characteristics, Philippines 1998

Background characteristic	Sexually active in last 4 weeks	Not sexually active in last 4 weeks						Never had sex	Number of women		
		Abstaining (postpartum)		Abstaining (not postpartum)		Missing					
		0-1 years	2+ years	0-1 years	2+ years						
<b>Age</b>											
15-19	6.9	1.0	0.0	1.1	0.0	0.1	90.9	100.0	2,924		
20-24	33.2	4.9	0.5	5.9	0.2	0.8	54.5	100.0	2,299		
25-29	58.1	5.1	1.4	9.9	0.8	0.7	24.0	100.0	2,209		
30-34	69.1	4.0	0.9	10.4	2.4	2.2	10.9	100.0	2,058		
35-39	71.0	2.7	0.4	12.9	4.3	1.4	7.4	100.0	1,842		
40-44	65.7	0.9	0.5	15.7	8.1	1.9	7.2	100.0	1,480		
45-49	57.4	0.2	0.1	21.6	12.6	1.8	6.3	100.0	1,170		
<b>Duration of union (yr)</b>											
0-4	74.2	9.1	0.9	13.9	0.5	1.4	0.0	100.0	1,838		
5-9	79.0	5.2	1.1	11.4	1.8	1.3	0.1	100.0	1,850		
10-14	76.9	3.7	0.9	13.1	3.6	1.8	0.0	100.0	1,655		
15-19	75.4	2.0	0.7	13.4	6.2	2.3	0.0	100.0	1,502		
20-24	71.2	1.2	0.1	18.1	8.0	1.3	0.0	100.0	1,149		
25-29	64.2	0.6	0.3	21.3	11.1	2.5	0.0	100.0	702		
30+	51.8	0.0	0.0	28.8	17.7	1.7	0.0	100.0	200		
Never in union	0.4	0.5	0.2	0.4	0.4	0.2	97.9	100.0	5,087		
<b>Residence</b>											
Urban	41.8	2.4	0.6	9.3	3.6	1.2	41.1	100.0	7,911		
Rural	54.5	3.5	0.5	9.7	2.2	1.0	28.5	100.0	6,072		
<b>Region</b>											
Metro Manila	34.5	1.8	0.6	9.6	4.4	1.5	47.6	100.0	2,818		
Cordillera Admin.	51.6	3.7	0.2	9.7	3.2	1.0	30.6	100.0	207		
Ilocos	46.0	3.0	0.7	10.3	3.5	1.1	35.4	100.0	689		
Cagayan Valley	56.9	2.6	0.6	9.1	1.7	1.3	27.9	100.0	474		
C.Luzon	49.0	3.1	0.2	9.3	3.4	0.8	34.1	100.0	1,414		
S.Tagalog	48.6	3.5	0.3	11.9	3.6	0.4	31.8	100.0	1,917		
Bicol	51.7	4.2	0.3	11.4	2.6	1.6	28.3	100.0	703		
W.Visayas	46.3	2.9	1.6	9.9	2.2	1.5	35.7	100.0	1,045		
C.Visayas	48.0	3.3	0.4	8.2	1.9	0.7	37.5	100.0	1,093		
E.Visayas	57.5	3.1	0.6	10.6	2.9	2.1	23.1	100.0	553		
W.Mindanao	55.7	2.7	0.7	6.3	1.2	1.4	32.0	100.0	530		
N.Mindanao	52.1	3.2	0.4	7.0	2.4	0.9	33.9	100.0	482		
S.Mindanao	52.5	2.9	0.5	7.3	2.4	0.7	33.6	100.0	925		
C.Mindanao	52.6	2.5	0.6	9.2	1.8	0.6	32.7	100.0	425		
ARMM	58.3	2.0	0.5	4.0	2.3	1.6	31.4	100.0	385		
Caraga	50.2	3.3	0.8	11.6	1.2	2.4	30.4	100.0	323		
<b>Education</b>											
No education	64.9	3.1	1.4	7.7	4.3	2.4	16.1	100.0	217		
Elementary	60.2	2.9	0.6	12.0	4.0	1.5	18.7	100.0	3,664		
High school	41.0	2.9	0.7	8.0	2.5	1.0	44.0	100.0	5,916		
College or higher	44.1	2.8	0.4	9.4	2.7	0.9	39.6	100.0	4,186		
<b>Current contraceptive</b>											
No method	30.5	3.5	0.8	9.9	3.8	1.4	50.1	100.0	9,936		
Pill	95.4	0.8	0.1	3.4	0.0	0.3	0.0	100.0	831		
IUD	92.9	0.9	0.2	5.7	0.3	0.0	0.0	100.0	310		
Sterilization	76.3	1.4	0.0	17.2	4.3	0.8	0.0	100.0	909		
Periodic abstinence	92.4	0.2	0.2	6.6	0.2	0.4	0.0	100.0	728		
Other	89.9	2.5	0.0	7.0	0.0	0.6	0.0	100.0	1,269		
Total	47.4	2.9	0.6	9.5	3.0	1.1	35.6	100.0	13,983		

Table 5.7 Postpartum amenorrhea, abstinence and insusceptibility

Percentage of births for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Philippines 1998

Months since birth	Amenor- rheic	Abstain- ing	Insus- ceptible	Number of births
<2	97.2	91.1	100.0	184
2-3	65.6	34.1	73.5	281
4-5	49.4	21.3	57.8	279
6-7	41.9	13.2	47.3	290
8-9	30.2	8.6	37.4	233
10-11	22.2	5.5	25.5	249
12-13	16.2	6.6	22.1	226
14-15	10.2	10.0	17.5	284
16-17	6.0	4.5	9.8	280
18-19	5.3	4.3	9.3	261
20-21	3.7	3.4	7.1	222
22-23	3.4	2.5	5.5	239
24-25	1.7	5.1	6.0	248
26-27	0.9	1.7	2.3	248
28-29	0.7	2.1	2.8	289
30-31	1.3	3.3	4.4	237
32-33	1.3	3.7	4.2	255
34-35	1.7	3.1	4.3	226
Total	19.4	11.5	23.8	4,530
Median	4.9	2.3	6.2	NA
Mean	7.4	4.8	9.0	NA
Prevalence/ incidence				
mean	6.9	4.1	8.5	NA

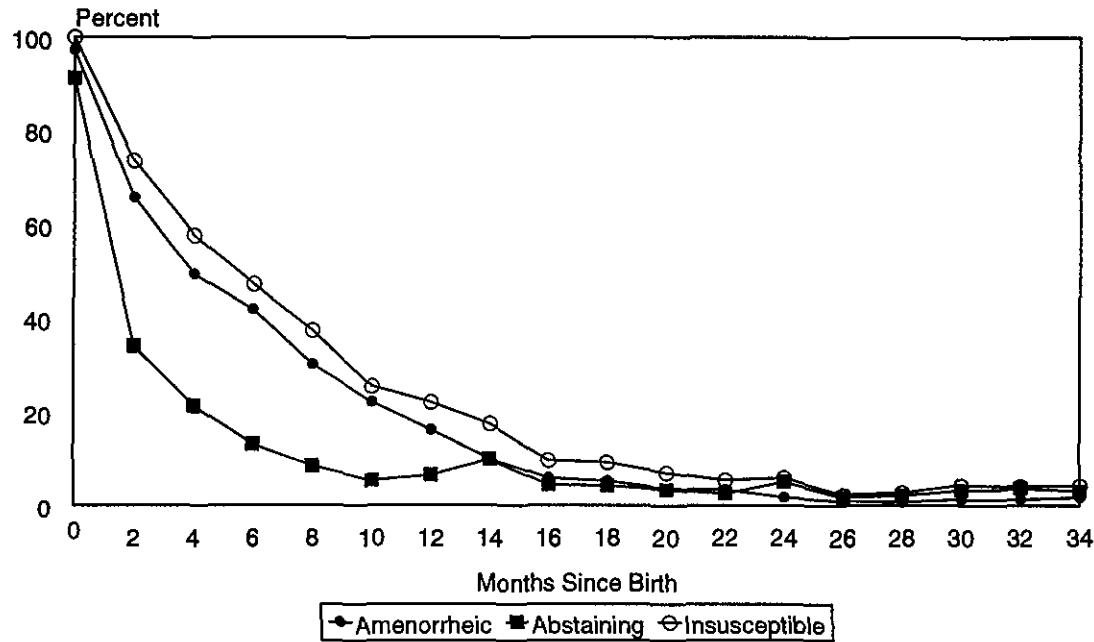
Note: Means and medians are based on the current status proportion in each two-month age interval (smoothed).

NA = Not applicable

Table 5.7 shows the percentage of births for which mothers are postpartum amenorrheic, abstaining and postpartum insusceptible by the number of months since the birth. Women who are insusceptible are defined as those who are either amenorrheic or abstaining following a birth and, thus, are not exposed to the risk of pregnancy. The estimates shown in Table 5.7 are based on current status data, that is, they refer to the proportion of births occurring  $x$  months before the survey for which mothers are still amenorrheic or abstaining at the time of the survey. All live births occurring during the three years prior to the survey are included. To reduce fluctuations in the estimates, the births are grouped in two-month intervals. The prevalence/incidence (P/I) mean is borrowed from epidemiology, and is provided to enable international comparison.

Among births 2 to 3 months prior to interview, 66 percent of the mothers are still amenorrheic. The proportion amenorrheic 6 to 7 months after the birth is 42 percent and 12 to 13 months after the birth it has declined to 16 percent. The duration of postpartum abstinence is shorter than the duration of amenorrhea (see Figure 5.3). One out of three mothers is abstaining from sexual relations 2 to 3 months following birth, but only 7 percent are still abstaining after a year. Overall, 47 percent of all mothers are susceptible to the risk of pregnancy 6 months after a birth (not taking into account contraceptive use).

**Figure 5.3**  
**Percentage of Births for Which Mothers are**  
**Postpartum Amenorrheic, Abstaining and Insusceptible**



1998 NDHS

## **5.7 Median Duration of Postpartum Amenorrhea, Abstinence, and Insusceptibility**

Presented in Table 5.8 is the median duration of postpartum amenorrhea, abstinence, and insusceptibility by selected background characteristics. As in Table 5.7, this table is based on current status data on all live births occurring in the three years prior to the survey. On average, women in the Philippines are amenorrheic for 4.9 months following a birth, abstain for 2.3 months, and are insusceptible to the risk of pregnancy for 6.2 months. The duration of postpartum amenorrhea is practically identical among women under 30 years of age and those 30 years or older. Urban women are amenorrheic for less than half the time as rural women, perhaps due to shorter duration of breastfeeding.

As expected, the median duration of amenorrhea is shortest in Metropolitan Manila (3 months), average for the more developed regions (4-5 months) and longest for the less developed regions of the country (6-9 months). Education is inversely related to the duration of postpartum amenorrhea. Women with no education are amenorrheic for twice as long (7.6 months) as women with high school or higher education (3.1 months).

Subgroup differences in the duration of abstinence tend to be less pronounced due to the brevity of this practice among Philippine couples.

The combined effect of amenorrhea and abstinence is reflected in the median duration of insusceptibility shown in Table 5.8. Rural women are insusceptible to the risk of pregnancy for twice as long (8.2 months) as urban women (4.1 months). This difference is due largely to the longer duration of postpartum amenorrhea among rural women. Education is inversely related to the duration of insusceptibility. Regional differences in the duration of insusceptibility generally replicate the differences in the duration of amenorrhea.

Table 5.8 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by selected background characteristics, Philippines 1998

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility	Number of births
<b>Age</b>				
<30	4.6	2.3	6.4	2,502
30+	5.2	2.2	5.8	2,027
<b>Residence</b>				
Urban	3.3	2.3	4.1	2,089
Rural	7.3	2.3	8.2	2,441
<b>Region</b>				
Metro Manila	2.7	2.1	3.4	615
Cordillera Admin.	7.1	2.7	8.0	86
Ilocos	7.2	2.8	7.9	204
Cagayan Valley	8.0	3.2	9.0	139
C. Luzon	3.1	2.9	4.5	445
S. Tagalog	4.3	2.4	6.3	643
Bicol	8.8	2.2	10.7	329
W. Visayas	4.4	2.1	6.2	338
C. Visayas	6.7	2.0	7.8	359
E. Visayas	6.2	2.1	7.2	276
W. Mindanao	4.4	2.1	7.4	177
N. Mindanao	6.1	2.3	7.2	199
S. Mindanao	5.9	2.2	6.9	297
C. Mindanao	4.1	2.1	4.4	153
ARMM	6.7	2.0	7.4	150
Caraga	6.2	2.0	7.9	122
<b>Education</b>				
No education	7.6	2.1	8.0	95
Elementary	7.6	2.1	8.0	1,479
High school	4.8	2.3	6.1	1,753
College or higher	3.1	2.3	4.0	1,203
<b>Total</b>	<b>4.9</b>	<b>2.3</b>	<b>6.2</b>	<b>4,530</b>

Note: Medians are based on current status.

## 5.8 Menopause

The onset of infecundity with increasing age reduces the proportion of women who are exposed to the risk of pregnancy. Table 5.9 shows the percentage of women who are not currently pregnant and not postpartum amenorrheic but whose last menstrual period occurred six or more months prior to the survey. The data show that the percentage rises rapidly with age, particularly after 46. By age 48, 38 percent of women are menopausal.

Another facet of loss of exposure that is not shown in this table is terminal separation, divorce, and widowhood in which a woman does not remarry before the end of her childbearing years.

The 1998 NDHS does not provide sufficient information on marriage history to define a reasonably precise indicator of terminal separation, divorce, and widowhood but some indications may be gathered from Table 5.1. A third factor affecting the end of fertility is the lack of exposure due to long-term abstinence among currently married women. Many of these women will probably not resume sexual relations. This information is given in Table 5.6.

Table 5.9 Menopause

*Menopause<sup>1</sup> among women 30-49 years by age, Philippines 1998*

Age	Percent menopausal	Number of women
30-34	1.2	2,058
35-39	1.4	1,842
40-41	43.6	600
42-43	5.8	612
44-45	9.4	513
46-47	20.7	454
48-49	37.6	472
Total	6.5	6,550

<sup>1</sup>Percentage of all women whose last menstrual period occurred six or more months preceding the survey. Pregnant and postpartum amenorrheic women were considered to be non-menopausal.



## CHAPTER 6

### FERTILITY PREFERENCES

The Philippine Family Planning Program (PFPP) aims to ensure the availability of reliable information and services necessary for families to manage the risk and outcomes of reproduction according to their health needs and fertility aspirations. It is anchored on a basic constitutional provision that recognizes the right of couples to determine for themselves the size of family they would like to raise.

Addressed in this chapter are questions that allow an assessment of the need for contraception, whether for birth spacing or for birth limitation, and the extent of unwanted fertility. The NDHS respondents were first asked if they wanted more children, and if so, how long they would prefer to wait before the next child. They were also asked the hypothetical question, if they could start anew, how many children they would want. Since the general objective of the Philippine Family Planning Program is to reduce the level of unmet need for family planning, particularly among high risk families, it is important for policymakers and program planners to understand the extent of unmet need in the country, whether for spacing or limitation. Two other issues are examined: the extent to which unwanted and mistimed pregnancies occur and the effect of such pregnancies on fertility rates.

Interpretation of data on fertility preferences has always been the subject of controversy. Survey questions on this topic have been criticized on the grounds that (a) answers are misleading because they may reflect unformed, ephemeral views, which are held with weak intensity and little conviction and (b) they do not take into account the effects of social pressure, or the attitudes of other family members, particularly the husband, who may exert a major influence on reproductive decisions.

The first objection has greater force in societies where the use of contraceptives is limited and the idea of conscious reproductive choice may still be unfamiliar or unknown. Thus, preference data from these settings should be interpreted with caution. This objection probably has little relevance in the Philippines where there is almost universal family planning knowledge and a moderate level of family planning use. The second objection is correct in principle. It is only recently that the program has realized the importance of the husband with regard to fertility decisions.

The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question on the desire for more children is rephrased to refer to desire for another child, after the one that they are expecting. To take into account the way in which the preference variable is defined for pregnant women, the results are classified by number of living children, including the current pregnancy as equivalent to a living child. In addition, the question on preferred waiting time before the next birth is rephrased for pregnant women to make clear that the information wanted is the preferred waiting time after the birth of the child the respondent is expecting.

Women who have been sterilized for contraceptive purposes also require special analytic treatment. The general strategy presented in this chapter is to classify them as wanting no more children.

## 6.1 Desire for More Children

Table 6.1 shows the percent distribution of married women by desire for children according to number of living children. It allows the examination of the potential need for contraceptive services, for spacing as well as for limiting births. The table indicates that 51 percent of all married women do not want any more children, almost one fifth want to delay their next birth for two or more years, and 10 percent have been sterilized. These figures suggest that 8 out of 10 married women are potentially in need of family planning services. Only 12 percent want another child within two years, while 5 percent are either undecided about their fertility preferences or want another child but are unsure when. (Figure 6.1).

The table also shows that among married women, the desire to limit childbearing increases, and the desire to delay the next birth decreases with the number of living children. The proportion of women who want to limit their childbearing increases dramatically after having one child. For example, among women with one living child, 16 percent want no more children and 49 percent want to delay the next child for at least two years; among women with 3 children, 56 percent want no more children, while 13 percent want to have their next child later.

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women by desire for more children, according to number of living children, Philippines 1998

Desire for children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	77.4	23.9	11.4	5.3	3.5	3.4	2.0	12.0
Have another later <sup>3</sup>	11.2	49.3	26.9	12.7	6.8	4.5	2.8	18.7
Have another, undecided when	1.9	1.5	1.1	1.1	0.8	0.9	0.5	1.1
Undecided	0.3	6.5	5.7	4.8	2.7	3.0	2.9	4.3
Wants no more	1.4	15.9	47.2	56.3	66.1	72.0	80.3	51.4
Sterilized	0.0	0.9	6.0	18.3	18.7	15.1	8.8	10.4
Declared infecund	7.7	1.8	1.6	1.3	1.3	0.9	2.4	1.8
Missing	0.0	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	378	1,401	1,708	1,695	1,218	762	1,174	8,336

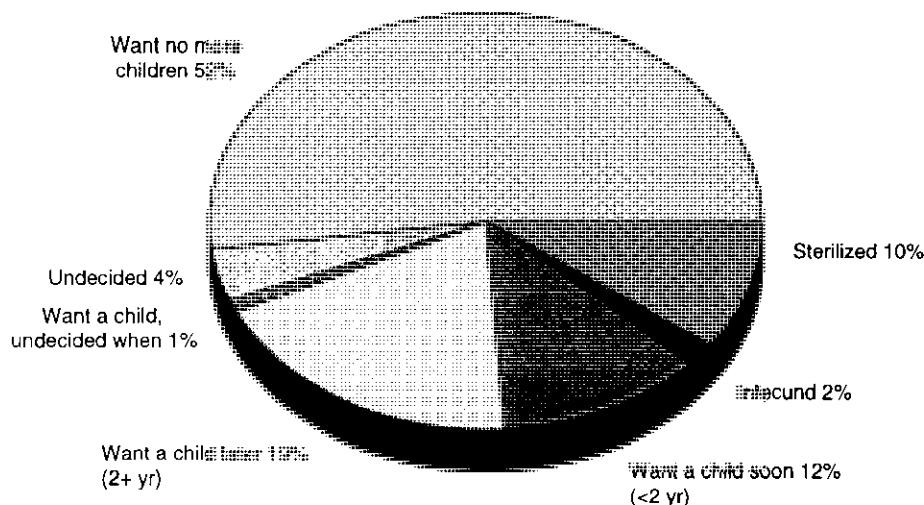
<sup>1</sup> Includes current pregnancy.

<sup>2</sup> Wants next birth within 2 years.

<sup>3</sup> Wants to delay next birth for 2 or more years.

Table 6.2 shows the distribution of married women by desire for children, according to age. The table shows that 53 percent of women age 15-19 want to delay having their next child by two or more years. This proportion diminishes with age, and the proportion wanting to limit increases. At age 35-39, only 7 percent of women want to have another child after 2 years, while 3 in 5 do not want any more children. Note that at least 3 out of 10 married women 20-24 years old stated that they do not want any more children.

**Figure 6.1**  
**Fertility Preferences among Currently  
 Married Women Age 15-49**



1998 NDHS

**Table 6.2 Fertility preferences by age**

Percent distribution of currently married women by desire for more children, according to age, Philippines 1998

Desire for children	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Have another soon <sup>1</sup>	20.2	13.0	12.2	14.5	11.2	10.7	7.6	12.0
Have another later <sup>2</sup>	52.9	47.4	32.9	17.2	6.6	3.0	0.9	18.7
Have another, undecided when	1.5	0.4	1.8	1.2	1.1	1.0	0.4	1.1
Undecided	7.2	7.1	5.4	4.8	4.2	2.5	0.7	4.3
Wants no more	17.8	31.4	44.2	52.7	61.0	58.8	64.2	51.4
Sterilized	0.0	0.2	3.3	8.8	14.9	20.3	18.1	10.4
Declared infecund	0.2	0.5	0.2	0.7	1.0	3.4	7.7	1.8
Missing	0.2	0.0	0.0	0.1	0.1	0.4	0.5	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	244	967	1,585	1,730	1,602	1,243	965	8,336

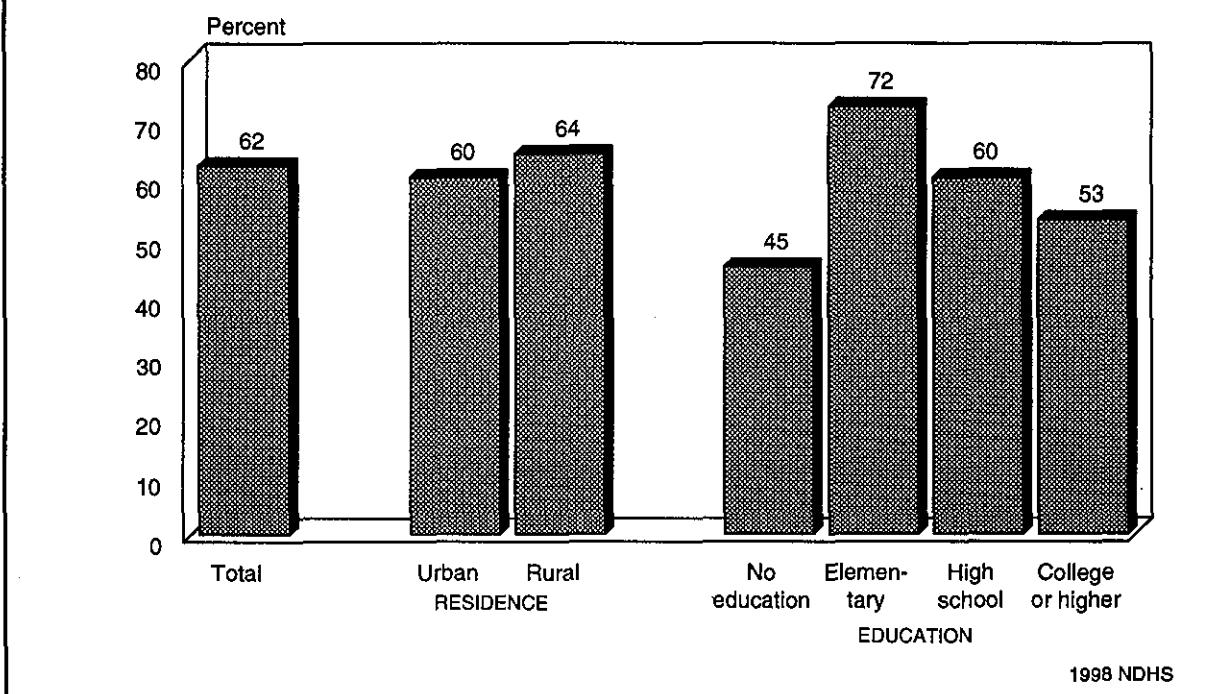
Wants next birth within 2 years.

Wants to delay next birth for 2 or more years.

Table 6.3 shows the percentage of married women who do not want more children according to parity and selected background characteristics. This table provides information about group variation in the potential demand for family planning. It is interesting to note that there is little difference in the desire to limit childbearing between urban and rural women (60 percent in urban areas and 64 percent in rural areas) (see Figure 6.2).

Considering the differentials by region of residence, the newly created Caraga Region has the largest proportion of women who want no more children (70 percent) while the Autonomous Region in Muslim Mindanao shows the lowest percentage of (23 percent). The latter may be related to religious practices. The desire to limit childbearing among married women varies with education. In general, except for the comparatively small number of women with no education, there is an inverse relationship between education level and the proportion of women wanting no more children. This is likely due to the concentration of more highly educated women at lower parities. At parity two and above, the expected positive relationship between education and the desire to limit childbearing is generally observed.

**Figure 6.2**  
**Percentage of Currently Married Women Who Want  
 No More Children by Residence and Region**



**Table 6.3 Desire to limit (stop) childbearing**

Percentage of married women who want no more children, by number of living children and selected background characteristics, Philippines 1998

Background characteristic	Number of living children <sup>1</sup>								Total
	0	1	2	3	4	5	6+		
<b>Residence</b>									
Urban	0.2	17.4	54.2	76.6	88.8	90.1	88.4		60.0
Rural	2.9	16.0	51.9	72.3	81.0	84.8	89.4		63.7
<b>Region</b>									
Metro Manila	(0.0)	14.4	50.0	74.4	88.3	(88.2)	(85.7)		54.5
Cordillera Admin.	*	(7.3)	43.9	55.6	75.4	89.5	88.2		61.4
Ilocos	*	13.3	49.4	65.8	82.5	86.0	83.9		57.5
Cagayan Valley	*	10.9	57.1	74.1	82.1	(88.9)	94.4		60.6
C. Luzon	(0.0)	19.3	50.0	79.9	90.1	(89.8)	(98.0)		63.4
S. Tagalog	*	11.9	60.9	79.8	92.5	95.8	93.3		67.4
Bicol	*	24.3	48.3	70.2	77.8	80.4	90.8		64.6
W. Visayas	*	16.1	65.0	78.9	88.2	(93.6)	92.3		66.9
C. Visayas	*	19.6	50.4	84.7	89.3	89.8	89.0		65.2
E. Visayas	*	29.4	50.6	71.4	84.3	86.2	94.0		70.4
W. Mindanao	(0.0)	21.4	44.9	67.0	83.1	89.8	86.2		58.9
N. Mindanao	*	20.3	51.7	73.7	86.3	(84.8)	93.0		67.8
S. Mindanao	(5.0)	24.6	51.6	79.2	90.7	96.6	93.5		63.5
C. Mindanao	*	16.1	66.0	75.3	79.3	(78.6)	76.8		62.6
ARMM	(0.0)	8.3	10.1	17.4	25.3	23.8	47.2		22.6
Caraga	*	7.7	63.3	84.7	86.1	88.7	94.6		70.2
<b>Education</b>									
No education	*	*	(10.8)	35.6	34.4	*	72.2		42.7
Elementary	1.9	24.2	54.9	77.2	81.8	86.3	90.5		72.1
High school	0.8	14.9	51.3	74.2	89.5	88.1	90.3		60.4
College or higher	1.6	15.2	55.3	75.4	87.9	88.9	82.8		53.1
Total	1.4	16.8	53.2	74.6	84.8	87.1	89.1		61.9

Note: Women who have been sterilized are considered to want no more children.

<sup>1</sup> Includes current pregnancy.

\* Less than 25 unweighted cases.

( ) Figures in parentheses are based on 25-49 unweighted cases.

## **6.2 Demand for Family Planning**

Unmet need is defined as the percentage of currently married women who are not using any method of family planning and do not want any more children or want to space their next birth. Specifically, women with an unmet need for spacing include pregnant women whose pregnancy was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and want to wait two or more years for their next birth. Unmet need for limiting purposes refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and women who are not using any method of family planning but who want no more children. These indicators are used to evaluate the extent to which the family planning programs are meeting the demand for services.

Table 6.4 shows the information on unmet need, met need (current use), and the level of potential demand for family planning among married women. Demand for family planning is defined as the sum of contraceptive prevalence (met need) and unmet need.<sup>1</sup> Overall, the total demand for family planning is 70 percent; around two-thirds of that demand is for limiting births. The demand for family planning for limiting purposes peaks among women age 35-39. Total demand varies little by urban-rural residence. By region, it is highest in Central Luzon, Northern Mindanao, Southern Mindanao, Central Mindanao and Caraga. Variation across educational groups is small except for a much lower level of demand among the small number of women with no education.

Since only three quarters of the demand for family planning is satisfied, there is need for the Family Planning Program to intensify efforts to address unmet need and the backlog in the demand for family planning services. Unsatisfied demand or unmet need is 20 percent: 9 percent for spacing births and 11 percent for limiting childbearing. Total unmet need decreases with age. It is higher among rural women, among women who have no education or elementary education, and among women in Bicol, Eastern Visayas, CAR and ARMM than other women.

## **6.3 Ideal Number of Children**

This section focuses on the respondent's ideal number of children. In ascertaining the total ideal number of children, the respondent is required to consider abstractly and independent of her actual family size, the number of children she would choose if she could start again. As shown in Table 6.5, the mean ideal number of children is 3.2 among all women and 3.5 among married women. Almost two-thirds of the women in the Philippines expressed a preference to have 3 or less children. It is interesting to note that 11 percent of women want to have 5 or more children, while 29 percent want only two. Only two percent of women gave a non-numeric response such as "it is up to God" or "don't know".

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<sup>1</sup>Also included but not shown in the table, is the small proportion of currently pregnant or amenorrheic women whose pregnancy or last birth was the result of a contraceptive failure.

**Table 6.4 Need for family planning services**

Percentage of currently married women with unmet need for family planning, met need for family planning, and the total demand for family planning services, by selected background characteristics, Philippines 1998

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning <sup>3</sup>			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	27.4	4.6	32.1	12.4	5.9	18.3	44.2	10.5	54.7	41.4	244
20-24	21.2	8.2	29.4	25.9	11.4	37.4	52.4	19.9	72.3	59.3	967
25-29	13.5	10.3	23.9	23.1	25.5	48.6	41.4	36.7	78.1	69.4	1,585
30-34	7.2	11.9	19.1	15.0	37.1	52.1	25.0	50.1	75.2	74.6	1,730
35-39	4.6	15.2	19.8	6.3	47.8	54.1	12.0	64.2	76.2	74.0	1,602
40-44	2.3	13.5	15.8	2.5	46.1	48.6	5.1	60.1	65.2	75.7	1,243
45-49	0.0	6.3	6.3	0.7	33.5	34.3	0.8	39.9	40.6	84.5	965
<b>Residence</b>											
Urban	7.3	9.0	16.3	14.5	36.2	50.7	24.3	45.6	69.9	76.6	4,222
Rural	9.8	13.4	23.3	10.6	31.6	42.2	22.9	46.2	69.1	66.4	4,114
<b>Region</b>											
Metro Manila	6.6	8.5	15.0	17.3	32.1	49.4	26.8	40.8	67.6	77.8	1,298
Cordillera Admin.	14.5	12.4	26.9	7.8	34.2	42.0	24.6	47.4	72.0	62.6	136
Ilocos	11.7	11.7	23.5	12.9	30.3	43.2	26.3	42.3	68.5	65.8	414
Cagayan Valley	8.8	9.9	18.7	14.4	33.9	48.3	24.2	44.8	69.0	72.9	322
C.Luzon	7.2	7.4	14.6	12.8	42.0	54.8	23.4	49.7	73.1	80.0	883
S.Tagalag	9.1	11.9	20.9	9.5	35.6	45.0	21.3	47.7	69.0	69.7	1,219
Bicol	7.9	17.3	25.1	11.2	25.1	36.3	22.6	43.2	65.8	61.8	481
W.Visayas	8.1	14.6	22.7	11.7	33.3	45.0	21.2	49.7	70.9	68.0	627
C.Visayas	5.2	9.9	15.1	12.8	38.7	51.5	20.6	50.1	70.7	78.6	620
E.Visayas	8.4	19.6	28.0	8.9	28.5	37.5	20.2	49.6	69.8	59.9	395
W.Mindanao	11.4	12.2	23.7	9.8	34.0	43.8	22.5	47.1	69.7	66.1	343
N.Mindanao	6.7	11.7	18.4	14.9	39.1	54.0	24.9	51.3	76.2	75.8	295
S.Mindanao	7.1	8.7	15.8	16.3	38.9	55.2	25.1	48.8	73.9	78.7	572
C.Mindanao	11.0	12.1	23.1	10.0	35.2	45.2	23.7	48.6	72.4	68.1	273
ARMM	21.9	7.5	29.4	8.3	7.5	15.8	31.7	15.1	46.8	37.1	252
Caraga	9.6	11.6	21.2	10.7	38.1	48.8	21.8	50.3	72.2	70.6	208
<b>Education</b>											
No education	14.0	14.5	28.4	5.9	9.4	15.3	20.8	24.3	45.1	37.0	169
Elementary	8.1	15.8	23.9	6.7	34.5	41.1	16.9	51.2	68.1	64.9	2,756
High school	9.1	9.6	18.7	14.3	35.8	50.2	26.3	46.3	72.5	74.2	3,050
College or higher	8.1	7.5	15.6	17.6	32.8	50.3	28.2	40.8	69.0	77.3	2,361
<b>Total</b>	<b>8.6</b>	<b>11.2</b>	<b>19.8</b>	<b>12.6</b>	<b>34.0</b>	<b>46.5</b>	<b>23.6</b>	<b>45.9</b>	<b>69.5</b>	<b>71.6</b>	<b>8,336</b>

<sup>1</sup> Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women whose last birth was mistimed, and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are women who are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted and women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children.

<sup>2</sup> Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

<sup>3</sup> Pregnant and amenorrheic women whose pregnancy was the result of a contraceptive failure are not included in the category of unmet need, but are included in total demand for contraception.

**Table 6.5 Ideal number of children**

Percent distribution of all women by ideal number of children and mean ideal number of children for all women and for currently married women, according to number of living children, Philippines 1998

Ideal number of children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
0	0.8	0.0	0.0	0.1	0.0	0.0	0.1	0.3
1	3.9	8.5	2.4	1.4	0.9	0.9	0.5	3.1
2	40.4	38.8	36.6	12.3	15.0	11.3	9.2	29.3
3	32.4	32.4	30.9	45.5	15.8	30.8	27.5	31.8
4	16.2	14.6	24.1	28.5	50.6	20.1	26.5	22.9
5	2.7	2.4	3.4	5.4	7.5	22.6	9.9	5.3
6+	1.8	2.2	2.2	5.5	8.6	11.5	22.1	5.4
Non-numeric response	1.9	1.0	0.5	1.3	1.6	2.8	4.3	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	5,407	1,621	1,824	1,783	1,297	808	1,243	13,983
Mean ideal number for: women	2.8	2.7	3.0	3.5	3.8	4.0	4.4	3.2
Number of women	5,305	1,605	1,815	1,761	1,276	785	1,190	13,736
CMW	2.9	2.8	3.0	3.5	3.9	4.0	4.4	3.5
Number of women	375	1,387	1,700	1,675	1,198	741	1,124	8,199

Note: The means exclude women who gave non-numeric responses.

<sup>1</sup> Includes current pregnancy.

There is a correlation between actual and ideal number of children. Women who want larger families tend to achieve larger families. It is also possible that women with larger families have larger ideal sizes because of attitudes that they acquired 20 or 30 years ago. Women may adjust upwards their ideal size of family as the actual number of children increases. For example, the mean ideal number of children of women with one living child is 2.7, while women who have 6 or more children expressed an ideal number of 4.4. Preference for a three-child family is expressed by 46 percent of women with three living children, and 51 percent of women with four children said four was their ideal number.

Despite the likelihood that some rationalization occurs, it is common to find that respondents state ideal sizes lower than their actual number of living children. This can be taken as an indicator of surplus or unwanted fertility. In fact, among women with five or more children, more than 60 percent say that if they were to start again they would choose to have fewer children.

Presented in Table 6.6 is the mean ideal number of children for all women by age and mother's background characteristics. The table shows that younger and better educated women are more likely to have lower fertility goals than other women. There is only a small difference in the ideal number of children among women in the rural and urban areas. Women in ARMM and CAR have mean ideal family sizes of four or more children compared with less than three children for women in Metropolitan Manila and Southern Mindanao. The mean ideal number of children for other regions ranges from 3 to 3.5 children.

**Table 6.6 Mean ideal number of children by background characteristics**

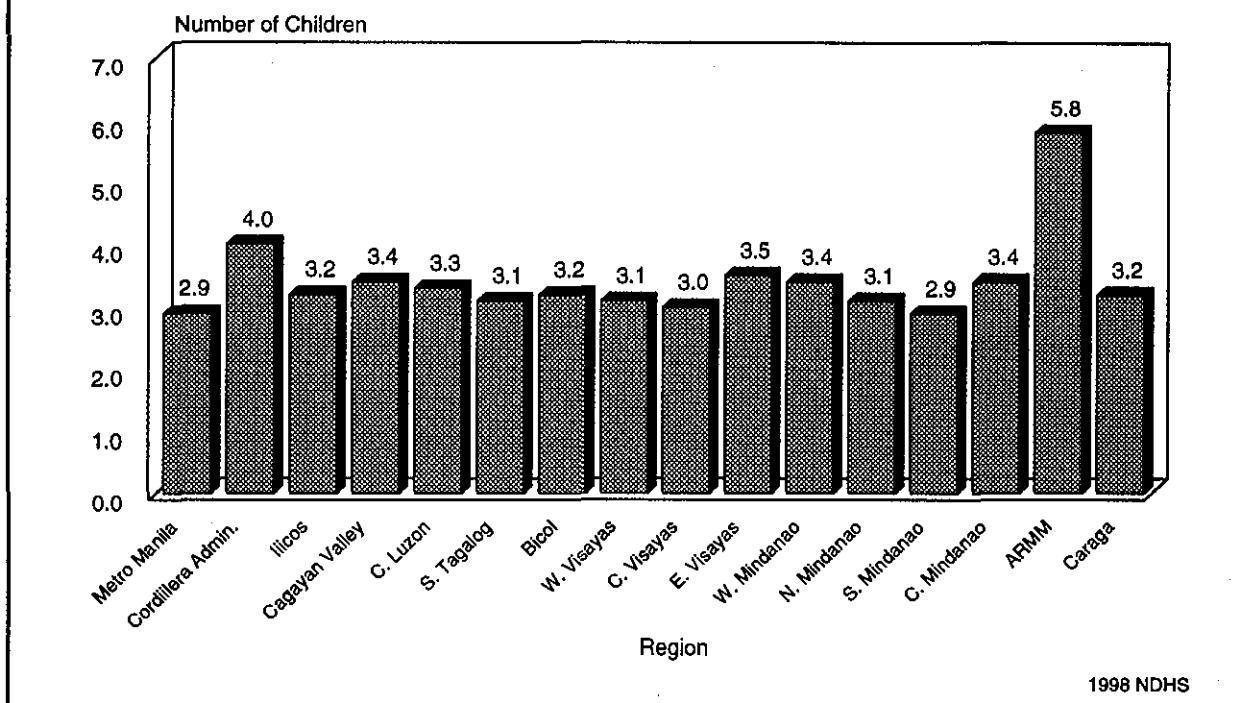
Mean ideal number of children for all women, by age and selected background characteristics, Philippines 1998

Background characteristic	Age of woman							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>								
Urban	2.7	2.9	2.9	3.2	3.2	3.5	3.5	3.1
Rural	2.9	3.1	3.3	3.5	3.8	3.9	4.0	3.4
<b>Region</b>								
Metro Manila	2.7	2.9	2.9	3.0	3.1	3.3	3.0	2.9
Cordillera Admin.	2.9	3.5	4.1	3.9	4.7	4.9	(5.2)	4.0
Ilocos	2.7	3.0	3.0	3.5	3.4	3.8	4.0	3.2
Cagayan Valley	2.9	3.0	3.2	3.6	3.8	3.7	4.1	3.4
C.Luzon	2.9	3.0	3.1	3.4	3.6	3.6	3.9	3.3
S.Tagalog	2.9	2.9	3.0	3.2	3.3	3.6	3.5	3.1
Bicol	2.5	2.7	3.0	3.4	3.5	3.7	3.9	3.2
W.Visayas	2.7	2.7	3.0	3.1	3.3	3.4	3.6	3.1
C.Visayas	2.6	2.7	2.8	3.1	3.1	4.0	3.6	3.0
E.Visayas	2.7	3.1	3.1	3.6	3.7	4.3	4.1	3.5
W.Mindanao	2.8	3.2	3.2	3.6	3.9	3.9	4.3	3.4
N.Mindanao	2.5	2.7	3.0	3.4	3.5	3.7	3.8	3.1
S.Mindanao	2.5	2.7	2.8	3.2	3.2	3.3	3.4	2.9
C.Mindanao	3.2	3.0	3.0	3.7	3.6	3.4	3.8	3.4
ARMM	4.6	5.8	6.1	6.4	6.2	6.1	6.6	5.8
Caraga	2.6	2.7	3.0	3.3	3.6	3.9	3.8	3.2
<b>Education</b>								
No education	*	(4.7)	5.2	5.9	5.1	5.0	5.2	5.1
Elementary	2.8	3.1	3.3	3.7	3.8	3.8	4.0	3.5
High school	2.8	2.9	3.0	3.2	3.4	3.6	3.5	3.0
College or higher	2.9	2.9	2.9	3.1	3.1	3.4	3.4	3.1
Total	2.8	2.9	3.1	3.3	3.5	3.7	3.8	3.2

\* Less than 25 unweighted cases

( ) Figures in parentheses are based on 25-49 unweighted cases.

**Figure 6.3**  
**Mean Ideal Number of Children for All Women by Region**



#### 6.4 Unplanned and Unwanted Fertility

For each child born in the preceding five years and any current pregnancy, women were asked questions to determine whether the particular pregnancy was planned, unplanned but wanted at a later time, or not wanted at all. Answers to these questions form a powerful indicator of the degree to which couples successfully control childbearing. In addition, the data can be used to gauge the effect on period fertility of the prevention of unwanted births.

Table 6.7 shows the distribution of births in the five years preceding the survey by fertility planning status, according to birth order and mother's age at birth. Fifty-four percent of all births were wanted at the time of conception, 27 percent were wanted but at a later time, and 18 percent were unwanted. As expected, the proportion of births which were wanted at the time of conception is highest among first births (75 percent) and among mothers under age 20 at the time of birth (63 percent). Mistimed pregnancies are highest for the second and third child. The proportion of unwanted births increases as mothers get older and have had more children. It is highest among fourth births and above (35 percent) and among mothers age 40-44 years (52 percent).

Table 6.7 Fertility planning status

Percent distribution of births in the five years preceding the survey by fertility planning status, according to birth order and mother's age, Philippines 1998

Birth order and mother's age	Planning status of birth				Number of births
	Wanted then	Wanted later	Wanted no more	Missing	
<b>Birth order</b>					
1	75.4	20.5	3.7	0.5	100.0
2	56.4	36.0	7.1	0.5	100.0
3	52.5	30.6	16.7	0.2	100.0
4+	39.3	24.5	35.1	1.0	100.0
<b>Age at birth</b>					
<20	62.5	29.2	7.4	0.8	100.0
20-24	58.6	33.2	7.6	0.6	100.0
25-29	54.3	29.6	15.5	0.6	100.0
30-34	53.0	22.4	24.0	0.6	100.0
35-39	45.0	19.3	34.9	0.8	100.0
40-44	39.7	7.7	51.9	0.6	100.0
45-49	(54.0)	(4.6)	(41.4)	(0.0)	100.0
<b>Total</b>	<b>54.2</b>	<b>26.9</b>	<b>18.2</b>	<b>0.7</b>	<b>100.0</b>
Note: Birth order includes current pregnancy.					
( ) Figures in parentheses are based on 25-49 unweighted cases.					

The wanted fertility rate is defined as the level of fertility that theoretically would result if all unwanted births could be prevented. The total wanted fertility rate provides another indicator of fertility aspirations and may be interpreted as the number of wanted births that a woman would bear by age 50.

Table 6.8 shows the total wanted fertility rates and total fertility rates for the three years preceding the survey by place of residence and level of education. The comparison makes clear that women will bear one child more than they desire if they continue to reproduce at current levels over time. This difference is an indication of the number of births a person needs to avoid over her reproductive life in order to attain her fertility aspirations. Regardless of the place of residence, region of residence, and level of education, the wanted number of births is lower than the actual number of births. Interestingly, women in rural areas have 1.5 children more than their desired number. Among urban women, the difference is less than one child. This indicates that urban women are more successful in achieving their fertility goals.

Table 6.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by selected background characteristics, Philippines 1998

Background characteristic	Total wanted fertility rate	Total fertility rate
<b>Residence</b>		
Urban	2.3	3.0
Rural	3.3	4.7
<b>Region</b>		
Metro Manila	2.0	2.5
Cordillera Admin.	3.6	4.8
Ilocos	2.5	3.4
Cagayan Valley	2.9	3.6
C.Luzon	2.8	3.5
S.Tagalog	2.6	3.7
Bicol	3.6	5.5
W.Visayas	2.9	4.0
C.Visayas	2.5	3.7
E.Visayas	3.8	5.9
W.Mindanao	2.9	3.9
N.Mindanao	3.1	4.8
S.Mindanao	2.5	3.7
C.Mindanao	3.0	4.2
ARMM	4.2	4.6
Caraga	3.1	4.6
<b>Education</b>		
No education	3.9	5.0
Elementary	3.3	5.0
High school	2.7	3.6
College or higher	2.5	2.9
<b>Total</b>	<b>2.7</b>	<b>3.7</b>

Note: Rates are based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 3.2.

Considering the gap between wanted and actual fertility by region, Eastern Visayas and Bicol have the largest differentials about two children. The gap between wanted and actual fertility is lowest for ARMM (0.4 births) and Metropolitan Manila (0.5 births). College-educated women seem to be most successful in achieving their fertility goals. They have a difference of less than one child between desired and actual fertility. On the other hand, women with elementary education have the largest gap (1.7 children).

## 6.5 Family Size Desires of Couples

Discussion of family planning between partners is thought to be instrumental in the decision to take joint action to plan family size. Information about women's perceptions concerning their partner's desired number of children is shown in Table 6.9. Seven out of ten currently married women say that they want the same number of children as their partner.

One in five currently married women believes that her partner wants more children than she does. Women with no education (32 percent) and those living in ARMM (42 percent) are more likely than other women to say that their partner wants more children than they do.

About 7 percent of currently married women report that they want more children than their partner. The proportion is largest among women in Southern Tagalog (11 percent).

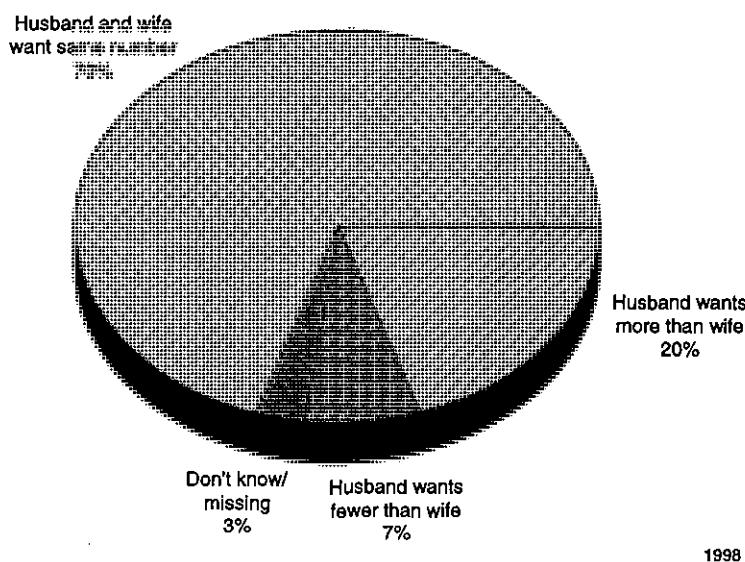
**Table 6.9 Couple's consensus on family size**

Percent distribution of currently married women by perceived consensus with husband regarding the number of children desired, according to selected background characteristics, Philippines 1998

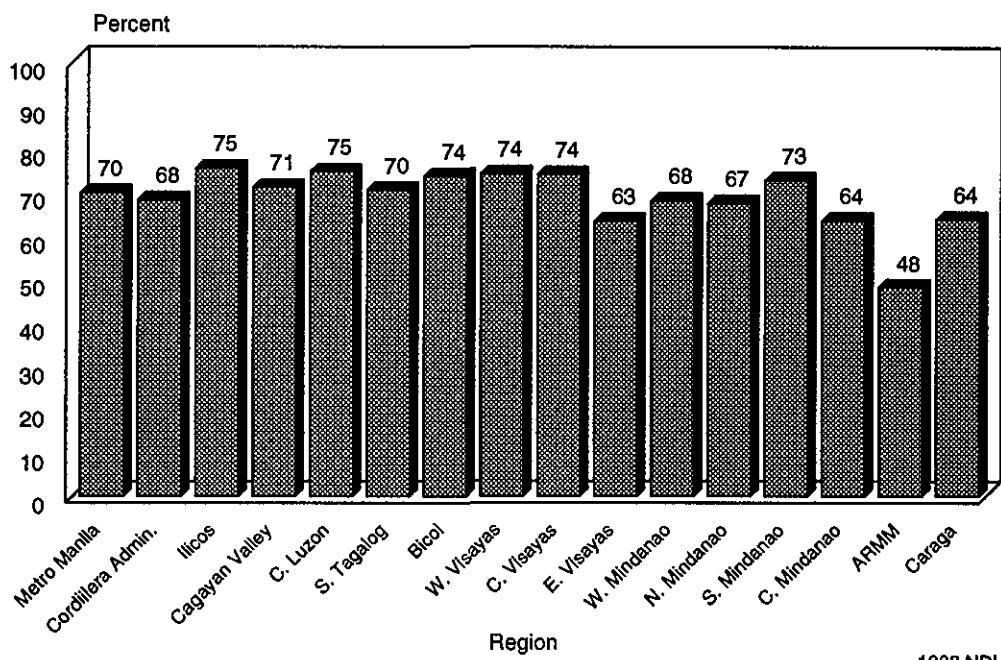
Background characteristic	Couple's consensus on desire for children <sup>1</sup>				Total	Number of women
	Husband and wife want same number	Husband wants more than wife	Husband wants fewer than wife	Don't know/missing		
<b>Age of woman</b>						
15-19	67.5	18.7	7.8	6.0	100.0	244
20-24	73.0	16.9	8.2	2.0	100.0	967
25-29	72.3	18.8	7.1	1.8	100.0	1,585
30-34	72.4	18.2	7.4	2.0	100.0	1,730
35-39	67.9	21.6	7.4	3.1	100.0	1,602
40-44	65.3	22.5	7.3	4.9	100.0	1,243
45-49	70.9	20.1	4.8	4.1	100.0	965
<b>Difference in age between woman and husband/partner</b>						
0-1 year	72.5	18.3	7.0	2.1	100.0	2,256
2-3 years	70.1	19.9	7.1	2.9	100.0	2,309
4-5 years	69.4	20.6	6.5	3.5	100.0	1,515
6+ years and over	69.0	20.3	7.7	2.9	100.0	2,209
<b>Residence</b>						
Urban	71.3	18.2	7.6	3.0	100.0	4,222
Rural	69.1	21.3	6.7	2.9	100.0	4,114
<b>Region</b>						
Metro Manila	69.7	17.8	8.2	4.4	100.0	1,298
Cordillera Admin.	68.1	20.2	6.5	5.2	100.0	136
Ilocos	75.4	16.9	5.2	2.6	100.0	414
Cagayan Valley	71.0	22.2	5.1	1.6	100.0	322
C.Luzon	74.6	16.5	6.7	2.2	100.0	883
S.Tagalog	70.3	17.3	11.2	1.2	100.0	1,219
Bicol	73.5	18.7	5.1	2.8	100.0	481
W.Visayas	74.1	15.9	6.2	3.8	100.0	627
C.Visayas	73.9	18.5	3.9	3.7	100.0	620
E.Visayas	63.3	26.7	7.3	2.7	100.0	395
W.Mindanao	67.9	22.4	6.5	3.2	100.0	343
N.Mindanao	67.4	23.6	6.5	2.5	100.0	295
S.Mindanao	72.6	17.7	8.4	1.3	100.0	572
C.Mindanao	63.5	24.7	6.4	5.5	100.0	273
ARMM	48.1	41.7	3.4	6.8	100.0	252
Caraga	63.8	27.0	7.3	1.9	100.0	208
<b>Education</b>						
No education	56.0	31.5	2.7	9.8	100.0	169
Elementary	66.3	22.5	7.6	3.6	100.0	2,756
High school	71.8	18.2	7.3	2.8	100.0	3,050
College or higher	73.7	17.6	6.8	1.9	100.0	2,361
Total	70.2	19.7	7.1	3.0	100.0	8,336

<sup>1</sup>Based on wife's perceptions of her husband's desires.

**Figure 6.4**  
**Currently Married Women by Perceived Consensus with Husband Regarding the Number of Children Desired**



**Figure 6.5**  
**Currently Married Women Whose Desired Number of Children is the Same as That Perceived as Desired by Their Husband**



## CHAPTER 7

### INFANT AND CHILD MORTALITY

#### 7.1 Background

Reported in this chapter is information on levels, trends, and differentials in neonatal, postneonatal, infant and child mortality. This information is relevant to the demographic assessment of both population and health policies and programs. Estimates of infant and child mortality may be used as inputs into population projections, particularly if the level of adult mortality is known from another source or can be inferred with reasonable confidence. Information on mortality of children also serves the needs of agencies providing health services by identifying sectors of the population which are at high mortality risk.

In this report, infant and child mortality are measured using the following rates:

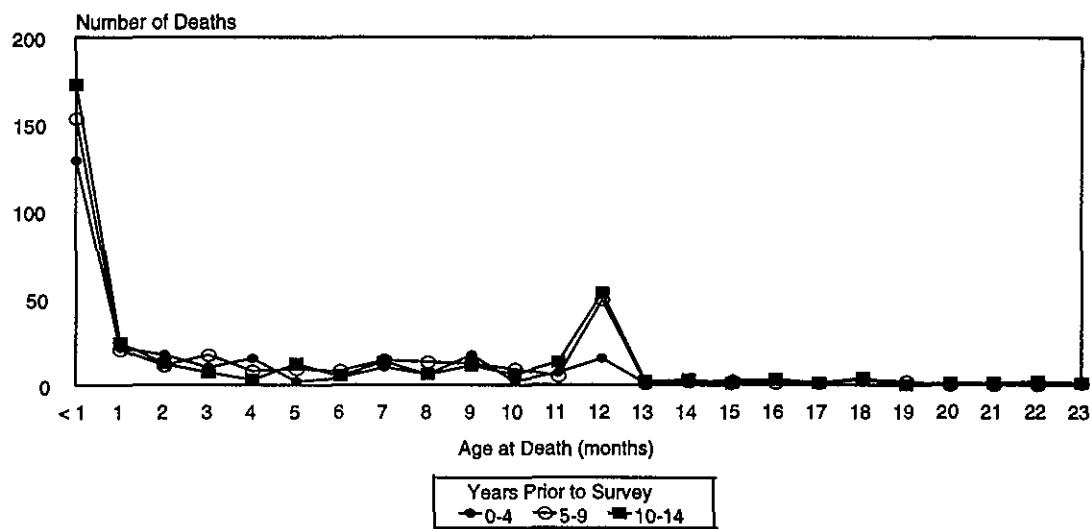
- Neonatal mortality (NN): the probability of dying within the first month of life;
- Postneonatal mortality (PNN): the probability of dying after the first month of life but before age one year;
- Infant mortality ( ${}_1q_0$ ): the probability of dying between birth and age one year;
- Child mortality ( ${}_4q_1$ ): the probability of dying between exact age one and age five;
- Under-five mortality ( ${}_5q_0$ ): the probability of dying between birth and exact age five.

The mortality rates presented in this chapter are computed from information derived from the questions asked in the pregnancy history section of the 1998 National Demographic and Health Survey (NDHS) individual woman's questionnaire. Data collection proceeded as follows: first, each woman was asked about the number of sons and daughters living with her in the same household as well as those who are living elsewhere, and the number who had died. At this point, the respondent was also asked about the number of pregnancies which did not result in a live birth. Next, the respondent was asked to give information on each of the pregnancies she had experienced. For each pregnancy, she was asked whether the pregnancy ended in a live birth or not. The name, sex, date of birth, age at last birthday, whether the birth was an outcome of a single or multiple birth, and survival status were recorded for all live births. If the child had died, the woman was asked the age at death. If the child was still living, information about his/her age at last birthday and whether the child lived with his/her mother was obtained. For pregnancies that did not result in a live birth, the respondent was asked if she or someone else did something to end the pregnancy, and what the duration of the pregnancy was at the time of loss.

The information on living and dead children is used to directly estimate mortality rates. It should be noted here that the reliability of these mortality estimates depends upon full recall about children who have died, the absence of significant differentials in birth dates between living and dead children, and accurate reporting of age at death. It should be said, however, that birth history data provide information that make detailed analyses of mortality possible.

A closer look at the pattern of reporting of age at death (Table C.6 in Appendix C and Figure 7.1) reveals some evidence of heaping of deaths. For the five years preceding the survey, a significantly high percentage of deaths was reported among infants 12 months of age. However, this heaping on age at death of 12 months is far lower for deaths occurring in the five years preceding the survey than it is for earlier deaths. Thus, reporting of age at death appears to be reasonable, though a more thorough investigation would result in more definitive conclusions.

**Figure 7.1**  
**Deaths among Children Under Two Years for**  
**Three 5-Year Periods Preceding the Survey**



1998 NDHS

In order to analyze trends in mortality, direct estimates based on the 1983, 1988 and 1993 NDS, the 1986 Contraceptive Prevalence Survey (CPS), and the Republic of the Philippines Fertility Survey (RPFS) are also presented in this chapter as well as estimates from the Vital Registration System (VRS).

Data from the maternity histories collected in previous surveys cited earlier provided direct estimates of infant mortality at various periods preceding each survey. The estimates from the vital registration system were calculated using the ratio of registered infant deaths to births expressed in terms of 1,000 live births. Comparing the point estimates of infant mortality from various sources during the same periods provides some insights as to the levels and trends of infant mortality.

## 7.2 Levels and Trends in Infant and Child Mortality

Table 7.1 presents various mortality estimates for children under five based on the 1998 NDHS. The infant mortality rate during the five-year period prior to the survey was 35 deaths per 1,000 live births, while the neonatal mortality rate was 18 deaths per 1,000 live births. The probability of dying between birth and the fifth birthday was 48 per 1,000 live births. The data indicate that the under-five mortality rate declined from 72 in the period 10 to 14 years prior to the survey to 48 in the most recent five-year period. While the various measures of mortality showed a declining trend, a variable pattern was observed in mortality during the post-neonatal period.

**Table 7.1 Infant and child mortality**

Infant and child mortality rates by five-year periods preceding the survey, Philippines 1998

Years preceding survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ( ${}_{(1}q_0$ )	Child mortality ( ${}_{(4}q_1$ )	Under-five Mortality ( ${}_{(5}q_0$ )
0-4	17.8	17.3	35.1	13.8	48.4
5-9	20.7	16.1	36.8	26.2	62.1
10-14	26.5	19.1	45.6	27.9	72.3

Table 7.2 and Figure 7.2 show direct measures of infant mortality from various sources. During the 25-year period, infant mortality continued to decline though at varying paces. Prior to 1980, the IMR based on the Vital Registration System (VRS) was generally higher than those directly measured from the four national demographic surveys, with the exception of the 1975 IMR estimate from the 1978 RPFS, which was higher than the VRS estimate. The 1983 and 1988 NDS rounds yielded more or less comparable IMR estimates for 1975 and 1980. The pattern observed with vital registration as a source is reversed for the period since 1980 in which the rates are much lower than those estimated from the national surveys. Point estimates for 1980 appear to be similar from all sources. There is, however, wide divergence in the preceding and succeeding periods.

The estimates from the 1998 NDHS are slightly higher than those from the 1993 NDS for the same time period, but the trends of the IMR estimates from these two surveys are similar. The IMR appears to have dramatically declined between 1980 and 1990.

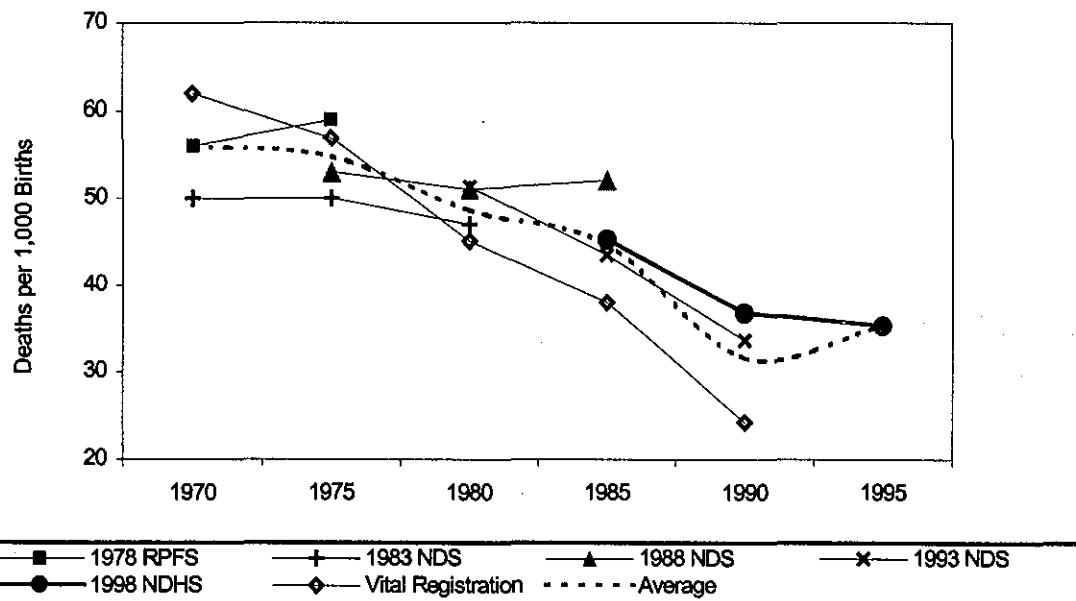
**Table 7.2 Trend in infant mortality rate**

Infant mortality rates from various sources, Philippines 1970-1995

Approximate Midpoint	1998 NDHS	1993 NDS	1988 NDS	1983 NDS	1978 RPFS	Vital Registration System
1995	35.1	-	-	-	-	-
1990	36.8	33.6	-	-	-	24.3
1985	45.6	43.5	52.0	-	-	38.0
1980	-	51.3	51.0	47.0	-	45.1
1975	-	-	53.0	50.0	59.0	56.9
1970	-	-	-	50.0	56.0	62.0

Source: Final Report of the Task Force on Infant Mortality Rate, NSCB, December 1992  
 1993 NDS and 1998 NDHS

**Figure 7.2**  
**Trends in Infant Mortality in the Philippines**  
**Various Sources, 1970-1995**



### 7.3 Infant and Child Mortality Differentials by Socioeconomic Characteristics

Socioeconomic factors are important determinants of the levels of infant and child mortality. In the 1998 NDHS, several socioeconomic factors have been measured such as place of residence and education of parents. Health beliefs and practices as well as accessibility or availability of health care services have also been collected. This section deals with the relationship between the childhood mortality measures and some of these variables.

Table 7.3 shows mortality measures by selected background characteristics of the mother for the 10-year period preceding the survey. In general, mortality in urban areas is lower than in rural areas.

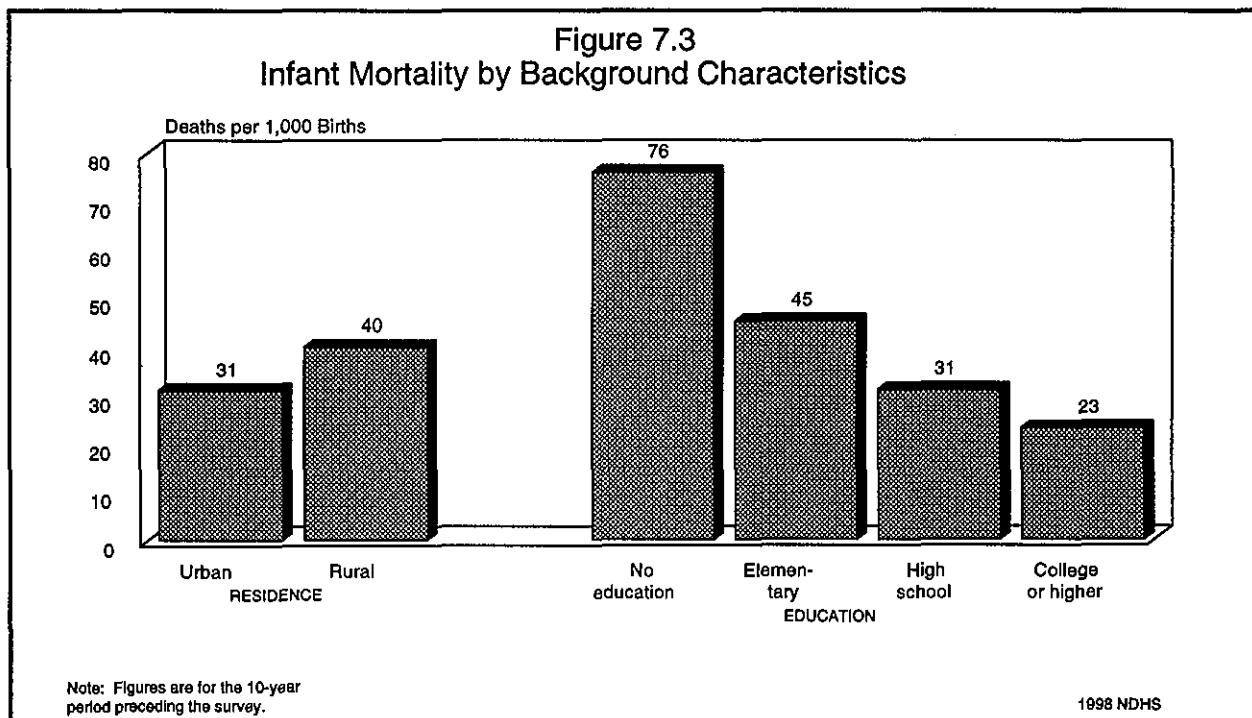
Table 7.3 Infant and child mortality by socioeconomic characteristics

Infant and child mortality rates for the 10-year period preceding the survey, by selected socioeconomic characteristics, Philippines 1998

Socioeconomic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (1q <sub>0</sub> )	Child mortality (4q <sub>1</sub> )	Under-five mortality (5q <sub>0</sub> )
<b>Residence</b>					
Urban	17.6	13.3	30.9	15.4	45.8
Rural	20.6	19.6	40.2	23.3	62.5
<b>Region</b>					
Metro Manila	15.1	8.6	23.7	15.3	38.6
Cordillera Admin.	18.7	24.0	42.7	10.1	52.4
Ilocos	27.7	13.9	41.5	10.2	51.3
Cagayan Valley	15.4	21.7	37.1	16.1	52.6
C. Luzon	20.1	8.5	28.7	11.1	39.4
S. Tagalog	21.1	14.2	35.3	18.5	53.2
Bicol	14.7	16.7	31.4	21.8	52.5
W. Visayas	11.2	14.8	26.0	16.1	41.6
C. Visayas	11.5	12.1	23.6	15.1	38.4
E. Visayas	31.3	29.5	60.8	26.4	85.6
W. Mindanao	19.5	25.1	44.6	31.7	74.9
N. Mindanao	21.1	19.9	41.0	24.8	64.8
S. Mindanao	19.1	21.8	40.9	21.1	61.2
C. Mindanao	27.0	21.4	48.4	29.0	75.9
ARMM	23.6	31.5	55.1	45.0	97.6
Caraga	28.6	24.6	53.2	31.0	82.5
<b>Education</b>					
No education	35.4	43.1	78.5	62.0	135.7
Elementary	20.4	24.7	45.1	29.2	73.0
High school	19.5	11.9	31.4	14.8	45.7
College or higher	15.3	8.1	23.4	5.0	28.3
<b>Medical maternity care</b>					
No antenatal/delivery care	29.2	47.6	76.8	36.6	110.6
Either antenatal or delivery	16.3	20.2	36.5	12.7	48.7
Both antenatal & delivery	15.4	7.2	22.5	7.6	30.0
Total	19.3	16.7	36.0	19.7	54.9

Among regions, infant mortality is lowest in Metro Manila and Central Visayas and highest in Eastern Visayas. Child mortality is lowest in Cordillera Administrative Region and Ilocos Region and highest in ARMM.

Table 7.3 also indicates that mortality rates for children of mothers with no education or elementary education are much higher than those with a high school or, especially, college education (see Figure 7.3). This supports the findings from the 1993 NDS and of previous studies which showed that children born to better educated mothers have a higher probability of surviving their early years. In reviewing Philippines studies in this area, using various statistical techniques and mortality indicators, Costelo (n.d.) concluded that there is an inverse relationship between maternal education and infant mortality.



Meanwhile, mortality among infants/children whose mothers had no antenatal care or medical assistance at the time of delivery is much higher than among those whose mothers had either or both antenatal care and medical assistance during delivery. This observation reinforces the findings of local studies which show that accessibility and availability of health services/facilities can be linked empirically to reduced rates of infant mortality. For instance, it was found that access to a midwife, hospital, primary health care center, or pharmacy is inversely associated with neonatal mortality, and that access to a health worker and hospital has a similar impact on postneonatal mortality. Access to modern medical practitioners can be linked to lower infant mortality.

## 7.4 Infant and Child Mortality Differentials by Demographic and Health Characteristics

Table 7.4 shows mortality by selected demographic characteristics which have been shown to influence the survival chances of children. In general, mortality is higher for males than for females. One of the variables known to have an effect on infant mortality is the mother's age at the time of delivery. The level of infant mortality, particularly during the neonatal period, and under-five mortality is higher among children whose mothers were less than age 20 at the time of delivery, decreases among mothers age 20-29, and increases among mothers age 40-49. Child mortality does not show a definite pattern of variation with mother's age.

Table 7.4 Infant and child mortality by demographic characteristics

Infant and child mortality rates for the 10-year period preceding the survey, by selected demographic characteristics, Philippines 1998

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality ( $1q_0$ )	Child mortality ( $4q_1$ )	Under-five mortality ( $5q_0$ )
<b>Sex of child</b>					
Male	20.6	18.7	39.4	20.8	59.4
Female	17.8	14.5	32.3	18.5	50.2
<b>Age of mother at birth</b>					
<20	26.4	15.0	41.4	19.1	59.7
20-29	16.3	17.0	33.3	18.1	50.8
30-39	21.0	16.7	37.6	23.3	60.0
40-49	35.3	16.7	52.0	16.0	67.2
<b>Birth order</b>					
1	20.8	11.0	31.8	10.5	42.0
2-3	16.6	15.3	31.9	14.3	45.7
4-6	18.5	20.2	38.8	28.4	66.0
7+	26.9	26.2	53.1	39.7	90.7
<b>Previous birth interval</b>					
<2 yrs	20.9	25.1	46.1	28.5	73.2
2-3 yrs	14.1	14.1	28.2	21.8	49.4
4 yrs+	22.7	14.8	37.5	11.2	48.3
<b>Size at birth<sup>1</sup></b>					
Small or very small	30.6	18.0	48.6	13.9	61.9
Average or larger	13.8	14.8	28.6	12.6	40.8

<sup>1</sup>Rates for the 10-year period preceding the survey

The levels of infant and child mortality among children of birth order 1 to 3 are similar but rise thereafter with increasing birth order. Mortality according to the length of the previous birth interval indicates the usual pattern of high mortality among children born less than two years after the previous birth. Mortality rates decline considerably for children born 2-3 years after a prior birth. However, neonatal mortality is markedly higher while the mortality rates after the neonatal period but before the age of 5 years are lower for children born 4 or more years after a previous birth compared to those born 2-3 years after a previous birth.

Children who were judged by their mothers to be "average or larger" at birth generally have lower mortality levels than children judged to be "small or very small" at birth. Within the first month of life, the level of mortality for small or very small infants is about twice that for those whose birth size is average or larger.

## 7.5 High-Risk Fertility Behavior

The distribution of women and children according to categories of increased risk of infant and child mortality as a result of fertility behavior of the mother is shown in Table 7.5. Children at elevated risk include those born to mothers who are too young or too old when they give birth, children of high parity, and children born after a short interval. The table also presents the relative risk of dying for children born in the last five years by comparing the proportion dead in each high-risk category with the proportion dead among children who are not in any high-risk category. This information is useful for designing and monitoring programs both to avoid high-risk behavior and to cope with elevated risks.

Of the children born in the five years preceding the survey, 57 percent are in one or more elevated risk categories. High birth order and short birth interval were the most common high-risk factors. More than one-fifth of all births are subject to multiple risk characteristics. Under the single risk category, 2 percent were born to mothers younger than 18 years, 3 percent were born to mothers older than 34 years, 15 percent were born after an interval of less than 24 months, and 16 percent were of birth order greater than 3. Under the multiple high-risk category, 10 percent were born to mothers over 34 years of age and were of birth order greater than 3, and 9 percent were born after an interval of less than 24 months and were of birth order greater than 3.

The risk ratios shown in the second column of Table 7.5 illustrate the relationship between the risk factors and mortality levels. The risk ratios for children in the single high-risk categories are generally lower than risk ratios for children in multiple high-risk categories. Those who fall into only one elevated risk category have a risk ratio of 1.44, while children who are in the multiple high-risk categories have a risk ratio of 2.14. The highest risk ratios for those in single high-risk categories are observed for children with mothers who are older than 34 years of age (2.14). As for children who are in the multiple high-risk categories, the highest ratio is observed for those with mothers who are older than 34 years, with birth interval less than 24 months, and with birth order greater than 3 (2.60). High-risk ratios are also observed for children with birth order greater than 3 and with birth interval less than 24 months (2.09).

**Table 7.5 High-risk fertility behavior**

Percent distribution of children born in the five years preceding the survey who are at elevated risk of dying and the percent distribution of currently married women at risk of conceiving a child with an elevated risk of dying, by category of increased risk, Philippines 1998

Risk Category	Births in the 5 years preceding the survey		Percentage of currently married women <sup>a</sup>
	Percentage of births	Risk ratio	
Not in any high-risk category	20.7	1.00	26.3 <sup>b</sup>
Unavoidable risk: first births	22.4	1.01	5.0
<b>Single high-risk category</b>			
Mother's age < 18	2.3	1.83	0.2
Mother's age > 34	2.6	2.14	9.2
Birth interval < 24	14.5	1.40	8.9
Birth order > 3	15.8	1.31	11.9
Subtotal	35.1	1.44	30.1
<b>Multiple high-risk category</b>			
Age <18 & birth interval <24 <sup>c</sup>	0.3	(6.13)	0.1
Age >34 & birth interval <24	0.4	(2.24)	0.7
Age >34 & birth order >3	9.7	1.91	26.6
Age >34 & birth interval<24 & birth order >3	2.8	2.60	3.7
Birth interval <24 & birth order >3	8.7	2.09	7.4
Subtotal	21.9	2.14	38.6
<b>In any high-risk category</b>	<b>56.9</b>	<b>1.71</b>	<b>68.7</b>
Total	100.0	-	100.0
Number	7,567	-	8,336

Note: Risk ratio is the ratio of the proportion dead of births in a specific high-risk category to the proportion dead of births not in any high-risk category,

NA = Not applicable

<sup>a</sup>Women were assigned to risk categories according to the status they would have at the birth of a child, if the child were conceived at the time of the survey: age less than 17 years and 3 months, age older than 34 and 2 months, latest birth less than 15 months ago, and latest birth of order 3 or higher.

<sup>b</sup>Includes sterilized women

<sup>c</sup>Includes the combined categories age <18 and birth order >3.

() Based on 25-49 unweighted cases

The distribution of currently married women according to category of potential risk if they were to conceive at the time of the survey is also presented. The results indicate that 30 percent of married women have the potential for giving birth to a child in a single high-risk category, and 39 percent have the potential for having a child in a multiple high-risk category.

In summary, the aforementioned findings indicate that more than half of the births in the last five years are at an elevated mortality risk. Moreover, two-thirds of married women had the potential for giving birth to a child at an elevated risk at the time of the survey. This implies that a significant reduction in infant and child mortality could be achieved through changes in childbearing patterns.

# **CHAPTER 8**

## **MATERNAL AND CHILD HEALTH**

Presented in this chapter are three areas of importance to maternal and child health: maternal care and delivery assistance, vaccinations, and common childhood diseases and treatment. Combined with information on neonatal and infant mortality, this information is useful in identifying subgroups of women who are in need of maternity care in planning for improvement of services.

### **8.1 Prenatal Care**

In the 1998 National Demographic and Health Survey (NDHS), respondents were asked whether they had seen anyone for prenatal care during the pregnancy preceding each live birth in the last five years. The interviewer was instructed to record all responses if more than one source of prenatal care was mentioned for the same pregnancy. However, for the purposes of this tabulation, only the provider with the highest qualifications is considered when there is more than one response. Table 8.1 shows that the overall level of prenatal care among Filipino women is high. Nine out of 10 children born in the five years preceding the survey were to mothers who received prenatal care, the same as the 1993 NDS findings. However, prenatal care by professional health workers (doctors, nurses and midwives) increased by 3 percentage points (from 83 percent of births in 1993 to 86 percent in 1998). Mothers received no prenatal care for one out of 13 births.

Births to mothers age 20-34, lower order births, births to urban mothers, better-educated mothers, and mothers living in Central Luzon and Metro Manila were more likely to receive medical attention during pregnancy than were other births in the five years prior to the survey. While more than half of children in the urban areas are born to mothers who receive prenatal care from a physician, in the rural areas nurses and midwives are more likely to be the prenatal care provider. Disparities in prenatal service provider are also present by region. In Metro Manila and Central Luzon, the most common prenatal care provider is a physician. In all other regions, mothers were as likely or more likely to consult a nurse or midwife, except in ARMM, where birth attendants are the most important source for prenatal care. There is a very strong association between mother's level of education and type of prenatal care received. Mothers who had high school education are eight times more likely to consult a physician for prenatal care than mothers who had no education. For mothers with some college education, the chance of using a doctor for prenatal care is even higher: 16 times higher than the level for mothers who had no formal schooling.

The maternal care program in the Philippines recommends that every pregnant woman have at least 3 prenatal care visits during her pregnancy, 1 visit in each of the three trimesters. Information about the visits made by pregnant women is presented in Table 8.2 and Figure 8.1. The findings indicate that for the majority of the births in the five years prior to the survey, mothers complied with the recommended minimum number of visits. For 77 percent of births, mothers made 3 or more prenatal visits. The median number of visits was 4.4.

**Table 8.1 Prenatal care**

Percent distribution of live births in the last five years by source of prenatal care during pregnancy, according to maternal and background characteristics, Philippines 1998

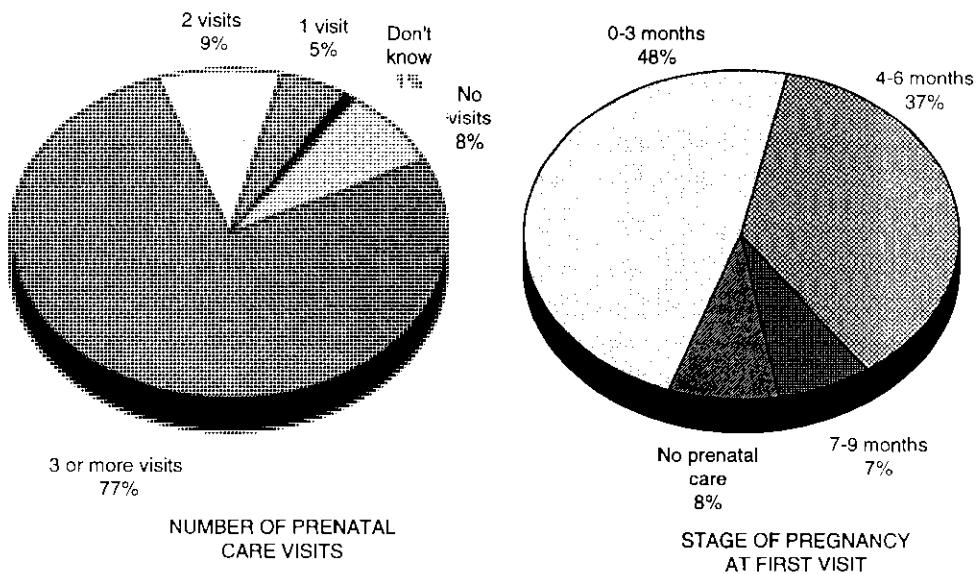
Background characteristic	Prenatal care provider <sup>1</sup>						Number of births
	Doctor	Nurse/ Midwife	Traditional birth attendant	No one	Missing	Total	
<b>Age at birth</b>							
<20	28.9	53.4	7.8	9.8	0.2	100.0	644
20-34	40.3	46.7	5.5	7.1	0.3	100.0	5,756
35+	34.9	46.0	9.2	9.8	0.0	100.0	1,167
<b>Birth order</b>							
1	51.5	40.5	3.4	4.5	0.1	100.0	1,907
2-3	43.4	45.1	5.2	6.1	0.2	100.0	2,863
4-5	30.2	53.4	7.4	8.6	0.4	100.0	1,548
6+	17.8	54.4	11.8	15.8	0.3	100.0	1,248
<b>Residence</b>							
Urban	56.6	35.8	2.8	4.6	0.1	100.0	3,465
Rural	23.2	56.7	9.2	10.5	0.3	100.0	4,101
<b>Region</b>							
Metro Manila	75.3	19.7	1.4	3.6	0.0	100.0	1,048
Cordillera Admin.	40.3	44.3	0.7	14.2	0.5	100.0	149
Ilocos	43.2	42.9	2.8	10.7	0.3	100.0	344
Cagayan Valley	31.1	41.5	6.6	20.5	0.3	100.0	242
C. Luzon	53.9	38.8	2.1	5.0	0.2	100.0	711
S. Luzon	43.7	42.5	5.1	8.7	0.0	100.0	1,078
Bicol	20.0	60.8	10.2	8.7	0.4	100.0	530
W. Visayas	38.1	54.7	2.6	4.5	0.2	100.0	585
C. Visayas	24.2	69.2	2.3	4.1	0.2	100.0	586
E. Visayas	19.8	57.6	7.7	14.5	0.5	100.0	446
W. Mindanao	21.9	51.8	19.2	6.1	1.1	100.0	304
N. Mindanao	21.3	61.8	5.0	11.9	0.0	100.0	331
S. Mindanao	31.7	57.6	2.5	8.3	0.0	100.0	489
C. Mindanao	20.8	61.7	9.2	7.8	0.5	100.0	264
ARMM	11.6	30.7	48.2	8.7	0.9	100.0	263
Caraga	26.3	63.0	4.5	5.4	0.7	100.0	197
<b>Mother's education</b>							
No education	4.5	22.7	39.4	32.8	0.6	100.0	169
Elementary	15.7	59.8	10.6	13.7	0.3	100.0	2,586
High school	37.6	53.7	3.6	4.9	0.3	100.0	2,913
College or higher	74.1	22.2	1.6	1.9	0.1	100.0	1,898
<b>Total</b>	<b>38.5</b>	<b>47.2</b>	<b>6.3</b>	<b>7.8</b>	<b>0.2</b>	<b>100.0</b>	<b>7,566</b>

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

<sup>1</sup>If the respondent mentioned more than one provider, only the most qualified provider is considered.

Table 8.2 and Figure 8.1 also present the distribution of births occurring in the past five years according to the timing of the first prenatal visit. For almost half of births, the first prenatal visit was made in the first 3 months of gestation. It should be noted that mothers of one in three births had their first prenatal care in the 4-7th month, while a small percentage was first examined during the last three months of pregnancy.

**Figure 8.1**  
**Number of Prenatal Care Visits and**  
**Stage of Pregnancy at First Visit**



1998 NDHS

For early detection of risks, mothers are advised to have a prenatal checkup as early as the first trimester of pregnancy. The results of the 1998 NDHS shows that the median age of pregnancy when women come for their first prenatal checkup is 3.9 months.

High quality prenatal care includes identifying a high-risk condition among pregnant women and educating them about potential symptoms that are indicative of serious conditions so that early intervention can be instituted. For live births that occurred in the five years before the survey for which mothers received a prenatal checkup, only 33 percent were informed about the dangers related to pregnancy. Younger mothers, those residing in rural areas, those coming from ARMM and those with no education or with low education are less likely to be told about the dangerous symptoms of pregnancy and are therefore more at risk (Table 8.2). Mothers who were more likely to be informed about such dangerous symptoms as vaginal bleeding, headache, dizziness and edema were mothers who were residing in urban areas and who have college education.

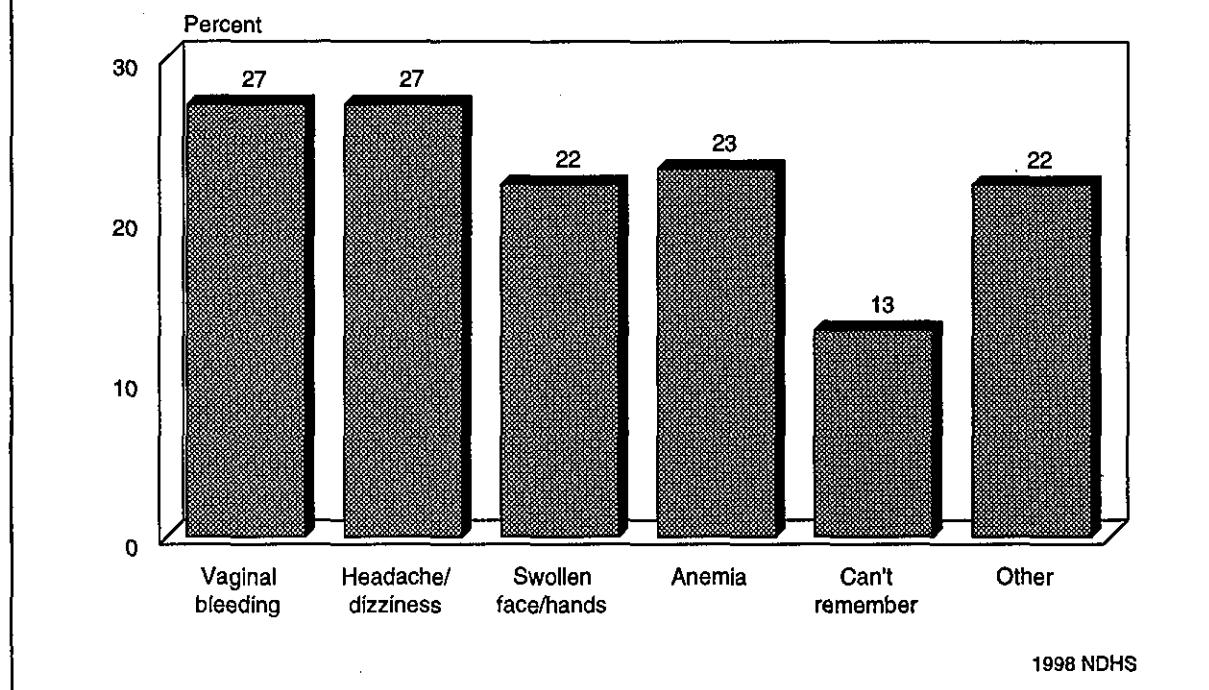
Among those women who were informed of the danger signs, about one-fourth said they were told to watch for vaginal bleeding, while another one-fourth said they were told about dizziness, headaches and blurred vision. Twenty-three percent were told that excessive paleness or anemia was a danger sign, while 22 percent were told to watch for swollen face or hands (Figure 8.2).

**Table 8.2. Information about danger signs of pregnancy**

Percent distribution of live births in the five years preceding the survey for which prenatal care was received by whether the mother was informed about specific symptoms during pregnancy that might be dangerous, according to background characteristics, Philippines 1998

Background characteristic	Informed about dangerous symptoms			Births with prenatal care
	Yes	No	Don't know/missing	
<b>Age group</b>				
15-19	30.2	69.6	0.3	100.0
20-24	34.8	63.4	1.7	100.0
25-29	32.1	66.8	1.1	100.0
30-34	34.1	64.9	1.0	100.0
35+	33.4	65.0	1.6	100.0
<b>Residence</b>				
Urban	37.4	61.2	1.4	100.0
Rural	29.6	69.1	1.2	100.0
<b>Region</b>				
Metro Manila	43.4	53.4	3.2	100.0
Cordillera Admin.	39.5	58.8	1.7	100.0
Ilocos	37.1	61.9	1.0	100.0
Cagayan Valley	41.7	56.6	1.7	100.0
C. Luzon	20.5	79.3	0.2	100.0
S. Tagalog	27.4	72.4	0.2	100.0
Bicol	29.0	68.8	2.2	100.0
W. Visayas	38.9	60.9	0.2	100.0
C. Visayas	31.2	68.4	0.4	100.0
E. Visayas	24.0	75.4	0.6	100.0
W. Mindanao	38.0	61.2	0.8	100.0
N. Mindanao	36.4	62.7	0.8	100.0
S. Mindanao	38.7	60.5	0.8	100.0
C. Mindanao	28.9	66.0	5.2	100.0
ARMM	21.0	74.9	4.2	100.0
Caraga	54.1	45.9	0.0	100.0
<b>Mother's education</b>				
No education	15.7	78.6	5.7	100.0
Elementary	25.0	73.8	1.2	100.0
High school	31.8	66.9	1.2	100.0
College	46.6	52.2	1.3	100.0
Total	33.3	65.4	1.3	100.0
				6,959

**Figure 8.2**  
**Knowledge of Dangerous Signs and Symptoms**  
**during Pregnancy among Women Who**  
**Received Prenatal Care**



## 8.2 Tetanus Immunization of Pregnant Women

In many countries, neonatal tetanus is a major cause of neonatal mortality. The maternal care program recommends that women receive at least two tetanus injections during the first pregnancy. Booster injections are given 6 months later, and in order to confer lifetime immunity, two more doses are given. Information on the number of tetanus toxoid injections received by pregnant women was collected in the 1998 NDHS and is presented in Table 8.3.

Mothers of 30 percent of live births in the five years prior to the survey did not receive a tetanus injection during that pregnancy, a decline of 5 percentage points from the 1993 NDS. Tetanus toxoid coverage is lower among births to mothers 35 years and above, those of birth order 6 and over, those from ARMM, and those whose mothers have no education.

The proportion of newborns whose mothers received two or more doses of tetanus toxoid has decreased from 42 percent in 1993 to 38 percent in 1998 while those who were given one dose of the vaccine increased from 22 percent in 1993 to 31 percent in 1998.

**Table 8.3 Tetanus toxoid vaccinations**

Percent distribution of live births in the five years preceding the survey by number of tetanus toxoid injections given to the mother during pregnancy, according to maternal and background characteristics, Philippines 1998

Background characteristic	Number of tetanus toxoid injections					Number of births
	None	One dose	Two doses or more	Don't know/missing	Total	
<b>Age at birth</b>						
< 20	31.0	27.2	40.5	1.2	100.0	644
20-34	28.8	31.4	38.5	1.3	100.0	5,756
35+	36.9	29.1	32.8	1.1	100.0	1,167
<b>Birth order</b>						
1	29.5	26.2	43.2	1.1	100.0	1,907
2-3	26.7	33.5	38.6	1.2	100.0	2,863
4-5	29.1	33.7	35.4	1.7	100.0	1,548
6+	40.9	27.3	30.7	1.2	100.0	1,248
<b>Residence</b>						
Urban	30.2	31.6	37.0	1.2	100.0	3,465
Rural	30.3	29.9	38.5	1.3	100.0	4,101
<b>Region</b>						
Metro Manila	35.2	33.8	30.3	0.7	100.0	1,048
Cordillera Admin.	32.5	32.5	33.7	1.2	100.0	149
Ilocos	30.8	29.7	38.7	0.8	100.0	344
Cagayan Valley	31.7	28.1	39.6	0.5	100.0	242
C. Luzon	30.1	33.8	34.7	1.5	100.0	711
S. Luzon	32.7	28.2	38.7	0.5	100.0	1,078
Bicol	29.9	29.9	38.1	2.0	100.0	530
W. Visayas	20.9	29.1	49.0	1.0	100.0	585
C. Visayas	22.2	35.3	41.2	1.3	100.0	586
E. Visayas	31.2	34.7	33.4	0.6	100.0	446
W. Mindanao	31.2	21.5	44.4	2.9	100.0	304
N. Mindanao	28.9	39.0	32.1	0.0	100.0	331
S. Mindanao	24.4	28.8	43.8	3.1	100.0	489
C. Mindanao	23.4	24.1	49.9	2.6	100.0	264
ARMM	57.6	18.4	20.4	3.6	100.0	263
Caraga	26.1	33.1	40.1	0.7	100.0	197
<b>Mother's education</b>						
No education	70.6	12.0	12.5	4.9	100.0	169
Elementary	33.9	29.5	35.5	1.1	100.0	2,586
High school	23.4	33.3	42.3	1.0	100.0	2,913
College or higher	32.2	29.9	36.2	1.7	100.0	1,898
<b>Total</b>	<b>30.3</b>	<b>30.7</b>	<b>37.8</b>	<b>1.3</b>	<b>100.0</b>	<b>7,566</b>

### **8.3 Iron and Iodine Supplementation During Pregnancy**

Anemia associated with pregnancy is treated by giving iron tablets to pregnant women during antenatal checkups. As shown in Table 8.4 for 75 percent of births during the five years prior to the survey mothers received iron supplements during the pregnancy. Mothers with college education, those who were residing in urban areas, and those who were pregnant for the first time were more likely to receive iron supplements during pregnancy. Regional coverage ranges from 83 percent (Western Visayas) to 38 percent (ARMM).

Iodine is provided to pregnant women to prevent mental retardation in children due to iodine deficiency. Only 57 percent of pregnant women received iodine supplements during the five years prior to the survey. Pregnant women age 20-34, those at lower parity, those who were residing in urban areas, and those with college education were more likely to be given iodine. Southern Mindanao showed the highest coverage of iodine for pregnant women (70 percent) while ARMM had the lowest (31 percent) coverage.

### **8.4 Delivery Assistance**

Among births in the past five years, 34 percent were born in a health facility, while the remaining 66 percent were delivered either in the respondent's home, someone else's home, or in another place. Table 8.5 indicates that there does not appear to be a strong relationship between mother's age and the place of delivery. Women who have lower birth order babies, live in urban areas, have post secondary or college education, and those who made 4 or more prenatal visits are more likely than other women to have delivered in a health facility. It is interesting to note that the vast majority of births of order six or higher (86 percent) were delivered at home. Delivery at a health facility was most common in Metro Manila (72 percent), and least common in ARMM (6 percent).

Presented in Table 8.6 is information on assistance at delivery. As with prenatal care, the interviewer was instructed to record all responses if more than one person assisted during delivery. However, for purposes of this analysis, only the most highly qualified attendant is considered if there is more than one response. Virtually all of the births in the past five years were delivered with some assistance, more than half by professional health workers. Medical assistance at delivery was more common among women with lower order births, those who live in urban areas, those who have high school or higher educational, and those who had 4 or more prenatal visits. In Metro Manila, 92 percent of births were attended by a professional health worker, while in ARMM the proportion attended by professional health workers is only 16 percent.

It is interesting to note that while a high proportion (86 percent) of pregnant women go to professional health workers for prenatal checkups, only 56 percent were assisted by these professional health workers during delivery (Table 8.6). This differential is especially acute among women in ARMM where most births (82 percent) are assisted by traditional birth attendants. Pregnant women with low and no education, those residing in rural areas, and those who have had many deliveries are more likely to give birth with assistance from a traditional birth attendant.

**Table 8.4 Iron and iodine supplementation during pregnancy**

Percent distribution of live births in the five years preceding the survey by whether the mother received iron tablets and iodine capsules during pregnancy, according to maternal background characteristics, Philippines 1998

Background characteristic	Iron tablets			Iodine capsules			Total	Number of births
	Yes	No	Don't know/missing	Yes	No	Don't know/missing		
<b>Age at birth</b>								
<20	69.0	30.3	0.6	48.4	50.5	1.1	100.0	644
20-34	75.9	23.3	0.8	58.5	40.3	1.2	100.0	5,756
35+	71.1	28.4	0.5	51.9	46.9	1.2	100.0	1,167
<b>Birth order</b>								
1	80.2	19.2	0.6	58.7	40.4	0.8	100.0	1,907
2-3	78.2	21.0	0.8	60.9	37.6	1.5	100.0	2,863
4-5	69.8	29.2	1.0	54.5	44.1	1.4	100.0	1,548
6+	63.6	35.8	0.6	46.2	52.9	0.9	100.0	1,248
<b>Residence</b>								
Urban	82.1	17.2	0.7	62.4	36.1	1.5	100.0	3,465
Rural	68.3	31.0	0.8	51.7	47.3	0.9	100.0	4,101
<b>Region</b>								
Metro Manila	81.9	17.0	1.1	61.4	36.5	2.2	100.0	1,048
Cordillera Admin.	68.4	30.2	1.4	53.5	45.0	1.4	100.0	149
Ilocos	72.0	26.8	1.1	61.0	37.6	1.4	100.0	344
Cagayan Valley	63.4	35.5	1.1	50.0	48.1	1.9	100.0	242
C.Luzon	74.3	25.3	0.4	57.6	41.5	0.8	100.0	711
S. Tagalog	78.5	21.5	0.0	59.6	40.1	0.3	100.0	1,078
Bicol	66.5	33.2	0.4	53.7	46.0	0.4	100.0	530
W.Visayas	83.2	16.6	0.2	64.4	35.2	0.4	100.0	585
C.Visayas	78.6	20.9	0.6	52.4	46.4	1.1	100.0	586
E.Visayas	71.1	28.3	0.6	44.2	55.1	0.6	100.0	446
W.Mindanao	64.3	33.3	2.0	51.3	46.4	2.3	100.0	304
N.Mindanao	72.8	27.2	0.0	51.3	48.7	0.0	100.0	331
S.Mindanao	82.3	17.7	0.0	69.5	29.2	1.3	100.0	489
C.Mindanao	71.6	26.5	1.9	55.1	42.6	2.4	100.0	264
ARMM	38.4	57.4	4.2	30.9	65.0	4.2	100.0	263
Caraga	81.6	17.9	0.5	61.9	37.2	0.9	100.0	197
<b>Mother's education</b>								
No education	21.7	74.6	3.7	16.0	80.4	3.7	100.0	169
Elementary	62.6	36.8	0.6	45.1	54.0	0.9	100.0	2,586
High school	79.4	19.9	0.6	61.6	37.2	1.2	100.0	2,913
College or higher	88.1	11.1	0.8	68.4	30.2	1.4	100.0	1,898
<b>Total</b>	<b>74.6</b>	<b>24.7</b>	<b>0.7</b>	<b>56.6</b>	<b>42.2</b>	<b>1.2</b>	<b>100.0</b>	<b>7,566</b>

**Table 8.5 Place of delivery**

Percent distribution of live births in the last five years by place of delivery, according to background characteristics, Philippines 1998

Background characteristic	Place of delivery			Total	Number of births
	Health facility	At home	Don't know/missing		
<b>Age at birth</b>					
<20	29.0	70.5	0.6	100.0	644
20-34	35.6	64.1	0.3	100.0	5,756
35+	30.3	69.6	0.1	100.0	1,167
<b>Birth order</b>					
1	49.8	49.9	0.3	100.0	1,907
2-3	37.0	62.8	0.2	100.0	2,863
4-5	26.5	73.0	0.6	100.0	1,548
6+	13.8	85.9	0.2	100.0	1,248
<b>Residence</b>					
Urban	52.1	47.7	0.2	100.0	3,465
Rural	19.2	80.4	0.4	100.0	4,101
<b>Region</b>					
Metro Manila	72.4	27.6	0.0	100.0	1,048
Cordillera Admin.	33.0	66.5	0.5	100.0	149
Ilocos	26.8	72.9	0.3	100.0	344
Cagayan Valley	19.7	80.1	0.3	100.0	242
C. Luzon	49.1	50.7	0.2	100.0	711
S. Luzon	34.0	66.0	0.0	100.0	1,078
Bicol	19.6	80.0	0.4	100.0	530
W. Visayas	32.0	67.8	0.2	100.0	585
C. Visayas	26.7	72.4	0.9	100.0	586
E. Visayas	17.0	82.6	0.3	100.0	446
W. Mindanao	18.5	80.8	0.7	100.0	304
N. Mindanao	20.0	79.7	0.4	100.0	331
S. Mindanao	33.6	66.2	0.2	100.0	489
C. Mindanao	21.7	77.8	0.5	100.0	264
ARMM	6.3	92.6	0.9	100.0	263
Caraga	22.0	77.8	0.2	100.0	197
<b>Mother's education</b>					
No education	4.7	94.7	0.6	100.0	169
Elementary	12.6	87.2	0.2	100.0	2,586
High school	33.3	66.3	0.4	100.0	2,913
College or higher	67.7	32.1	0.2	100.0	1,898
<b>Prenatal visits during pregnancy</b>					
None	9.9	89.9	0.2	100.0	589
1-3 visits	17.1	82.9	0.0	100.0	2,277
4+ visits	45.9	54.0	0.1	100.0	4,640
Total	34.2	65.5	0.3	100.0	7,566

**Table 8.6 Assistance during delivery**

Percent distribution of live births in the last five years by type of assistance during delivery, according to background characteristics, Philippines 1998

Background characteristic	Assistance during delivery						Number of births
	Doctor	Nurse/midwife	Traditional birth attendant	Relative/other	No one	Don't know/missing	
<b>Age at birth</b>							
<20	26.0	25.1	46.4	2.2	0.0	0.2	100.0 644
20-34	31.9	26.8	39.1	1.8	0.2	0.3	100.0 5,756
35+	28.5	19.4	49.2	2.4	0.3	0.0	100.0 1,167
<b>Birth order</b>							
1	45.7	25.2	28.2	0.8	0.0	0.1	100.0 1,907
2-3	33.0	28.7	36.3	1.8	0.1	0.2	100.0 2,863
4-5	24.1	24.8	48.6	1.8	0.3	0.4	100.0 1,548
6+	11.9	19.5	63.8	4.1	0.4	0.2	100.0 1,248
<b>Residence</b>							
Urban	47.6	30.9	20.7	0.5	0.1	0.2	100.0 3,465
Rural	16.8	20.9	58.7	3.0	0.2	0.3	100.0 4,101
<b>Region</b>							
Metro Manila	64.1	27.4	7.8	0.7	0.0	0.0	100.0 1,048
Cordillera Admin.	28.5	19.6	16.3	33.5	1.7	0.5	100.0 149
Ilocos	25.4	41.0	33.3	0.0	0.0	0.3	100.0 344
Cagayan Valley	18.6	23.5	49.2	8.5	0.0	0.3	100.0 242
C. Luzon	45.7	38.6	15.4	0.0	0.0	0.2	100.0 711
S. Luzon	33.1	26.7	39.9	0.3	0.0	0.0	100.0 1,078
Bicol	14.3	29.9	55.1	0.4	0.0	0.4	100.0 530
W. Visayas	28.7	19.4	50.8	0.8	0.0	0.2	100.0 585
C. Visayas	23.7	32.0	44.0	0.2	0.0	0.2	100.0 586
E. Visayas	16.1	11.6	70.3	1.1	0.6	0.3	100.0 446
W. Mindanao	15.9	23.7	55.2	4.3	0.2	0.7	100.0 304
N. Mindanao	20.0	14.6	61.0	4.3	0.2	0.0	100.0 331
S. Mindanao	27.6	19.4	48.8	3.3	0.8	0.2	100.0 489
C. Mindanao	20.3	22.7	55.1	0.9	0.5	0.5	100.0 264
ARMM	3.4	12.1	81.9	0.7	0.5	1.3	100.0 263
Caraga	21.8	18.4	58.5	1.1	0.0	0.2	100.0 197
<b>Mother's education</b>							
No education	4.5	4.9	75.5	11.4	3.1	0.6	100.0 169
Elementary	10.6	19.7	66.0	3.2	0.2	0.3	100.0 2,586
High school	29.2	34.2	35.2	1.1	0.0	0.2	100.0 2,913
College or higher	63.5	21.9	14.0	0.5	0.0	0.1	100.0 1,898
<b>Prenatal visits during pregnancy</b>							
None	8.6	15.0	67.8	7.8	0.8	0.0	100.0 589
1-3 visits	14.6	24.2	57.9	3.0	0.2	0.1	100.0 2,277
4+ visits	41.9	27.7	29.8	0.6	0.0	0.0	100.0 4,640
Total	30.9	25.5	41.3	1.9	0.2	0.2	100.0 7,566

Note: Figures are for births in the period 1-59 months prior to the survey. If the respondent mentioned more than one attendant, only the most qualified attendant is considered.

The 1998 NDHS data shows that of the 7,566 births in the five years preceding the survey, 21 percent were to mothers who had complications during delivery (Figure 8.3). Prolonged labor was the most common complication (17 percent) followed by excessive bleeding (7 percent), vaginal infection (2 percent), and convulsions (1 percent). Prevalence of prolonged labor appears to have increased slightly from the 15 percent found in the 1993 Philippine National Safe Motherhood Survey (PNSMS) (NSO and MI, 1994:53). The occurrence of excessive bleeding and convulsions decreased slightly over the same time period.

**Figure 8.3**  
**Percentage of Live Births with  
 Complications During Delivery**

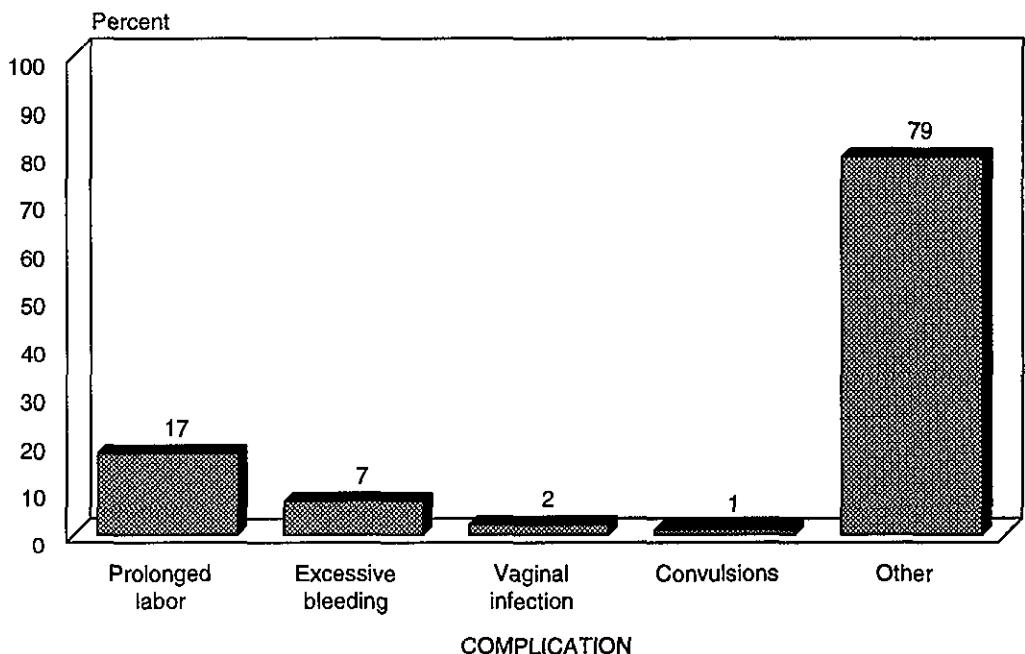


Table 8.7 shows that about 6 percent of births in the Philippines are born by caesarean section. This constitutes 1 in 6 of all deliveries in a health facility. As expected, caesarean sections are more common among urban than rural births (9 vs. 3 percent, respectively). They are also more common in Central Luzon (13 percent) and Metro Manila (9 percent) and least common in ARMM (less than 1 percent). Table 8.8 indicates that the most common reason for caesarean section is a big baby followed by prolonged labor and breech delivery.

**Table 8.7 Delivery characteristics**

Percent distribution of live births in the last five years by whether the delivery was by caesarean section, birth weight, and the mother's estimate of baby's size at birth, Philippines 1998

Background characteristic	Delivery by caesarean section	Birth weight			Size of child at birth				Number of births
		Less than 2.5 kg	2.5 kg or more	Don't know/missing	Very small	Smaller than average	Average or larger	Don't know/missing	
<b>Age at birth</b>									
< 20	2.3	9.5	41.7	48.8	6.6	14.6	78.2	0.6	644
20-34	5.9	9.7	51.9	38.4	5.4	12.7	81.4	0.5	5,756
35+	6.5	9.2	43.7	47.1	7.1	12.0	80.4	0.5	1,167
<b>Birth order</b>									
1	8.7	11.9	59.8	28.3	5.7	13.5	80.5	0.3	1,907
2-3	6.7	9.5	54.3	36.3	5.1	12.6	81.8	0.5	2,863
4-5	2.9	8.3	44.3	47.4	6.0	12.9	80.4	0.7	1,548
6+	1.9	8.0	30.8	61.2	7.1	11.8	80.5	0.7	1,248
<b>Residence</b>									
Urban	8.9	11.5	66.2	22.2	5.1	12.2	82.5	0.2	3,465
Rural	2.9	8.0	35.8	56.2	6.4	13.3	79.5	0.7	4,101
<b>Region</b>									
Metro Manila	8.7	12.3	73.5	14.3	4.9	12.1	83.0	0.0	1,048
Cordillera Admin.	4.7	9.2	33.0	57.8	11.1	19.1	69.3	0.5	149
Ilocos	5.6	7.1	41.2	51.7	5.1	16.1	78.0	0.8	344
Cagayan Valley	4.1	4.6	38.0	57.4	4.4	10.7	84.7	0.3	242
C. Luzon	12.7	9.2	62.8	28.0	4.8	9.2	85.4	0.6	711
S. Tagalog	6.9	9.2	56.0	34.8	2.4	10.5	86.7	0.3	1,078
Bicol	2.5	10.9	34.0	55.1	8.0	11.9	79.0	1.1	530
W. Visayas	4.9	12.1	40.9	47.0	4.7	13.0	82.2	0.2	585
C. Visayas	2.3	12.6	50.8	36.7	8.8	19.4	71.6	0.2	586
E. Visayas	2.1	8.5	33.9	57.6	9.5	13.0	77.2	0.3	446
W. Mindanao	2.7	7.3	35.1	57.5	7.5	15.2	75.6	1.6	304
N. Mindanao	2.4	6.0	48.1	45.9	7.6	11.9	79.5	0.9	331
S. Mindanao	7.3	10.6	56.0	33.4	7.7	15.2	76.8	0.4	489
C. Mindanao	4.7	5.9	42.1	52.0	6.1	10.9	82.3	0.7	264
ARMM	0.7	4.5	15.0	80.5	2.9	8.8	87.0	1.3	263
Caraga	2.5	11.6	51.9	36.5	3.9	13.6	82.3	0.2	197
<b>Mother's education</b>									
No education	0.6	2.1	7.9	90.0	5.2	18.3	75.6	0.9	169
Elementary	1.7	8.1	28.9	63.0	7.1	14.2	78.2	0.6	2,586
High school	4.3	11.0	54.2	34.8	5.9	13.6	80.0	0.5	2,913
College or higher	13.5	10.1	75.1	14.8	3.9	9.0	86.7	0.3	1,898
Total	5.7	9.6	49.8	40.6	5.8	12.7	81.0	0.5	7,566

Information on the baby's birth weight was also obtained in the 1998 NDHS. Table 8.7 shows that among children born in the five years prior to the survey, 41 percent had weights unknown to mothers. Ten percent of all births, or 16 percent of those who were weighed, were reported to weigh less than what is considered normal birth weight (2,500 grams). Mothers were also asked for their own objective assessment of whether the baby's birth size was very large, larger than average, average, smaller than average, or very small. According to mothers' reports, 19 percent of births in the past five years were smaller than average or very small at birth.

**Table 8.8 Reasons for caesarean section**

Percent distribution of caesarean births in the five years before the survey by reason for the operation, Philippines 1998

Reason for caesarean section	Percent
Preeclampsia	6.3
Eclampsia	2.7
Baby too big	34.3
Breach	12.3
Fetal distress	7.1
Prolong labor	12.1
Excessive discharge	3.7
Excessive bleeding	2.2
Other	14.5
Missing	4.9
Total	100.0
Number	411

## 8.5 Postnatal Care

The delivery of postnatal care services is aimed at preventing the occurrence of maternal and infant morbidity and mortality in the country. The mother's background characteristic and the providers of good quality postnatal care contribute greatly in the success of this goal. The 1998 NDHS results (Table 8.9 and Figure 8.4) show that 3 in 5 postpartum mothers (59 percent) receive examinations after delivery. Mothers who have delivered for the first time, those who reside in urban areas and those who have some college education are more likely to consult a doctor for a checkup after delivery. Traditional birth attendants are the major care givers postnatal in the rural areas and among the uneducated mothers. Those mothers who never consult a health worker for a prenatal checkup are least likely to consult health workers for postnatal care services. While in Metro Manila 51 percent of postpartum mothers consult doctors, 59 percent of mothers in ARMM rely on the traditional birth attendants for post delivery care.

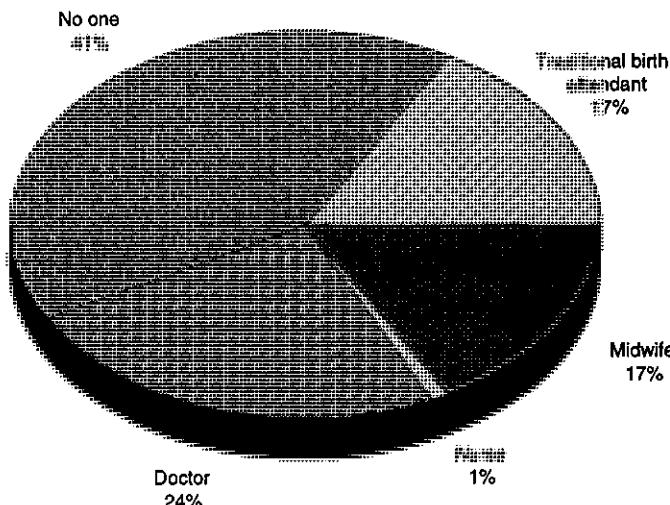
**Table 8.9 Postnatal care**

Percent distribution of live births in the last five years by source of postnatal care during delivery, according to maternal and background characteristics, Philippines 1998

Background characteristic	Postnatal care provider						Number of births
	Doctor	Nurse	Midwife	Traditional birth attendant	Relative/friend	Other	
<b>Age at birth</b>							
<20	17.3	1.1	13.9	21.3	0.0	0.0	46.4
20-34	24.4	1.2	17.2	16.4	0.0	0.1	40.6
35+	22.2	0.8	15.4	18.8	0.0	0.2	42.5
							100.0
							644
<b>Birth order</b>							
1	33.7	1.6	14.8	13.1	0.0	0.0	36.8
2-3	26.0	1.0	18.5	15.7	0.0	0.1	38.8
4-5	17.5	1.4	17.3	19.7	0.0	0.1	44.0
6+	9.5	0.7	14.6	23.8	0.1	0.3	51.1
							100.0
							1,248
<b>Residence</b>							
Urban	36.8	1.8	16.9	10.4	0.0	0.1	34.1
Rural	12.2	0.7	16.5	22.9	0.0	0.2	47.6
							100.0
							3,465
<b>Region</b>							
Metro Manila	50.9	3.4	11.6	6.9	0.0	0.0	27.3
Cordillera Admin.	17.0	2.4	10.4	0.0	0.0	0.0	70.3
Ilocos	20.1	0.8	13.3	10.5	0.5	0.0	55.4
Cagayan Valley	15.3	0.5	22.4	12.6	0.0	0.0	48.6
C. Luzon	33.0	1.0	25.1	9.8	0.0	0.0	31.1
S. Luzon	28.0	1.2	28.2	11.4	0.0	0.0	31.2
Bicol	11.1	0.7	18.4	25.7	0.0	0.4	43.9
W. Visayas	20.4	0.2	9.3	17.4	0.0	0.0	52.6
C. Visayas	14.8	0.8	22.4	18.8	0.0	0.0	43.2
E. Visayas	7.4	0.2	6.6	21.1	0.0	0.0	64.8
W. Mindanao	13.1	2.3	21.5	33.7	0.0	0.5	28.9
N. Mindanao	10.6	0.6	7.1	20.1	0.0	0.6	61.0
S. Mindanao	25.7	0.0	11.9	25.3	0.0	0.6	36.5
C. Mindanao	12.8	0.2	11.3	12.3	0.0	0.2	63.1
ARMM	4.7	1.1	7.6	59.0	0.0	0.0	27.6
Caraga	14.5	0.7	17.2	24.0	0.0	0.0	43.5
							100.0
							197
<b>Mother's education</b>							
No education	0.9	0.4	3.4	43.5	0.0	0.6	51.2
Elementary	7.1	0.8	15.2	26.7	0.1	0.2	50.0
High school	19.9	1.0	22.3	14.1	0.0	0.1	42.6
College or higher	53.2	1.9	11.2	6.8	0.0	0.0	26.9
							100.0
							1,898
<b>Prenatal visits during pregnancy</b>							
None	3.7	0.0	5.4	12.3	0.0	0.3	78.2
1-3 visits	8.7	0.9	14.3	23.8	0.0	0.2	52.1
4+ visits	33.3	1.5	19.4	14.4	0.0	0.0	31.4
							100.0
Total	23.5	1.2	16.7	17.2	0.0	0.1	41.4
							7,566

Note: Figures are for births in the period 1-59 months prior to the survey. If the respondent mentioned more than one attendant, only the most qualified attendant is considered.

**Figure 8.4**  
**Distribution of Live Births by Source of Postnatal Care**



1998 NDHS

The majority of mothers received postnatal care during the first 2 weeks after delivery, while only 13 percent visited more than 28 days after delivery (Table 8.9a). Details of health services received during the postnatal care are enumerated in Table 8.10. It is interesting to note that services rendered during the postnatal visit are mainly focused on baby care and to a lesser extent on abdominal examination of the mother.

**Table 8.9a Timing of postnatal care**

Among live births in the five years preceding the survey for which postnatal care was received, percent distribution by timing of the postnatal care, Philippines, 1998

Timing of visit	Percent
0-6 days	42.7
7-13 days	29.0
14-20 days	11.1
21-27 days	3.6
28-34 days	9.8
35-41 days	0.5
42-48 days	0.6
49 days or more	2.0
Don't know/missing	0.7
Total	100.0
Number of births	4,435

**Table 8.10 Postnatal care services**

Among live births in the five years preceding the survey for which postnatal care was received, percentage receiving specific services during postnatal checkup, Philippines, 1998

Type of service	Services received			Total
	Yes	No	Don't know/ missing	
Abdominal exam	73.5	26.0	0.5	100.0
Breast exam	41.0	58.3	0.6	100.0
Internal exam	37.5	61.8	0.7	100.0
Family planning advice	44.5	54.6	0.9	100.0
Breastfeeding advice	69.3	30.0	0.7	100.0
Baby care advice	72.9	26.5	0.6	100.0
Checkup of baby	79.2	20.3	0.5	100.0

## **8.6 Maternal Mortality**

Although the level of maternal mortality is generally considered to be one of the most important indicators of a nation's health, reliable data are extremely difficult to obtain. Even in countries with relatively complete vital registration systems, maternal deaths are often underreported or misclassified as non-maternal (WHO and UNICEF, 1997:3). Household surveys offer an alternative data collection mechanism; however, surveys may also suffer from underreporting and misclassification. In addition, they require large sample sizes in order to provide reliable estimates even at the national level. This is because, even where levels of maternal mortality are high, the actual number of maternal deaths is likely to be relatively small (WHO and UNICEF, 1997:4). For these reasons, estimates of maternal mortality rates and ratios must be interpreted cautiously.

Data were collected in the NDHS that allow direct estimation of maternal mortality rates and ratios. The procedure used is the direct method modification of the so-called "A Sisterhood-approach" in which respondents are asked about the survivorship of all live births of their natural mother (siblings). A description of the methodology used is presented in Appendix C along with a discussion of various measures of data quality and results.

The results confirm the finding from the 1993 NDS that the maternal mortality ratio in the Philippines is approximately 200 per 100,000 live births. Because the ratio from the 1998 survey—172 per 100,000 births for the period approximately 1991-1997—is lower than the level of 209 estimated from the 1993 NDS for the period 1987-1993, it is tempting to conclude that there has been a decline in the maternal mortality in the Philippines in recent years. Such a conclusion is not possible, however, due to the large sampling errors associated with these estimates (Stanton et al., 1997:44). Analysis of sampling errors suggest that the 95 percent confidence limits around these estimates are on the order of 30 percent, meaning that the true estimate of the maternal mortality ratio for 1991-97 lies somewhere between 120 and 224, which clearly encompasses the former estimate of 209. The fact that just a few additional maternal deaths reported or omitted can radically change the maternal mortality ratio limits the usefulness of the methodology in measuring change in maternal mortality ratios over short periods of time.

Another indicator of maternal mortality is the proportion of deaths due to maternal causes. In the 1998 NDHS, maternal deaths represent approximately 14 percent of all deaths to women aged 15-49. Another useful indicator is the lifetime risk of dying of maternal causes. Based on the 1998 data, it appears that Filipino women face a 1 in 100 chance of dying of maternal causes in their lifetime.

## 8.7 Immunization of Children

To assist in the evaluation of the Expanded Program on Immunization (EPI), the 1998 NDHS collected information on immunization coverage for all children born in the five years prior to the survey. For each child, the mother was asked if she had a health card for the child, and, if so, the interviewer asked to see it. When a mother was able to show the health card to the interviewer, the dates of vaccinations were copied from the card to the questionnaire. If the child had never received a health card, or the mother was unable to show the card to the interviewer, the mother was asked whether the child had received vaccinations against specific diseases, namely, tuberculosis (BCG), measles, diphtheria, pertussis, tetanus (DPT), and polio.

Shown in Table 8.11 is the overall vaccination coverage for children age 12-23 months according to the source of the data used for determining the coverage. Data were obtained from health cards for only 41 percent of children vaccinated; for the remaining children the immunization coverage information is based on their mother's report. Overall, 73 percent of children are considered completely immunized, meaning that they received all of the basic vaccines. This is slightly higher than the 72 percent found in the 1993 NDS. The coverage rate is highest for BCG and the first doses of DPT and polio (around 91 percent). The dropout rate<sup>1</sup> measured by the difference in coverage between the first and third doses is 10 percent for DPT and 11 percent for polio. These are slightly lower than the 1993 NDS dropout rates of 12 and 14 percent, respectively.

Table 8.11 Vaccination by source of information

Percentage of children 12-23 months of age who have received specific vaccines at any time before the interview and before 12 months of age, according to whether the information is from the vaccination card or from the mother, Philippines 1998

Background characteristic	Percentage of children who received:										Number of children	
	BCG	DPT			Polio			Measles	All <sup>1</sup>	None		
		1	2	3+	1	2	3+					
<b>Vaccinated at any time before the survey</b>												
Vaccination card	40.6	41.0	39.7	37.8	41.3	40.1	38.2	34.9	33.8	0.0	610	
Mother's report	50.1	49.3	47.3	43.0	50.4	48.0	43.5	44.0	39.0	7.7	864	
Either source	90.8	90.3	87.0	80.9	91.7	88.1	81.7	78.9	72.8	7.7	1,474	
<b>Vaccinated by 12 months of age</b>												
	90.6	90.1	86.7	78.7	91.5	87.8	80.6	70.9	65.3	7.9	1,474	

Note: For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

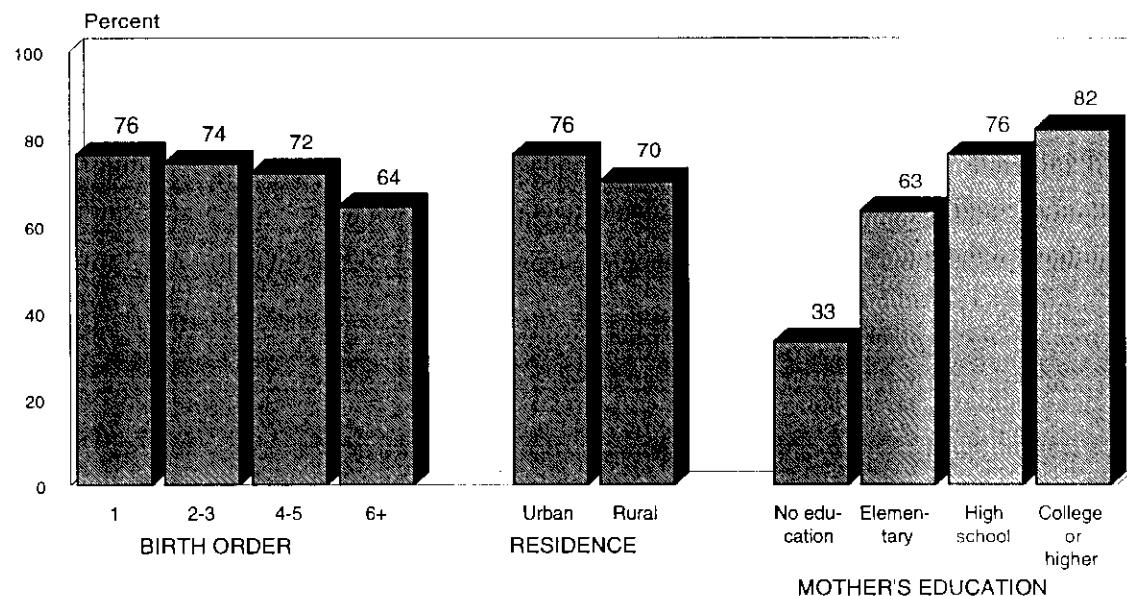
<sup>1</sup>Children who are fully vaccinated (i.e., those who have received BCG, measles and three doses of DPT and polio).

<sup>1</sup> Dropout rate (dose1-dose 3)/dose 1\*100

An important aim of the EPI program is that basic vaccines—namely BCG, measles, and 3 doses each of DPT and polio vaccines be given before the child reaches the first birthday. A child is considered fully immunized if given these basic vaccines during this period. Immunization coverage for the first 12 months is also reported in Table 8.11. Based on information obtained from the health cards and from mothers' reports, 65 percent are considered fully immunized. This is 3 percentage points higher than in 1993 (62 percent) (NSO and MI, 1994:100).

Differentials in immunization coverage among children 12-23 months by background characteristics are presented in Table 8.12 and Figure 8.5. The rates are based on both health cards and mother's report. Coverage varies only slightly by the sex of the child; however, the rates have a strong negative association with birth order, and a very strong positive association with mother's education. Urban children are somewhat more likely than rural children to be fully immunized. ARMM has consistently shown low coverage for all vaccines as well as for the presence of vaccination cards.

**Figure 8.5**  
Vaccination Coverage among Children 12-23 Months



**Table 8.12 Vaccinations by background characteristics**

Percentage of children 12-23 months who had received specific vaccines by the time of the survey (according to the vaccination card or the mother's report) and the percentage with a vaccination card by background characteristics, Philippines 1998

Background characteristic	Percentage of children who received:										Percent- age with a card	Number of children		
	DPT			Polio			Measles	All	None					
	BCG	1	2	3+	1	2	3+							
<b>Child's sex</b>														
Male	89.4	89.2	85.7	79.9	90.4	86.4	80.5	78.8	71.9	9.1	41.8	762		
Female	92.1	91.4	88.3	81.9	93.0	89.8	83.0	79.0	73.8	6.2	40.9	712		
<b>Birth order</b>														
1	95.5	95.2	93.0	86.2	96.3	93.1	87.5	82.9	76.4	3.2	46.4	399		
2-3	90.8	90.9	87.7	82.3	91.8	88.1	82.3	79.8	74.2	7.8	39.7	553		
4-5	89.4	89.8	86.0	79.3	91.4	87.3	80.5	78.2	72.2	8.6	35.8	296		
6+	84.0	80.7	75.7	69.9	83.6	79.9	71.9	70.6	63.9	14.2	43.9	227		
<b>Residence</b>														
Urban	95.0	94.8	92.0	85.5	95.8	92.2	85.5	82.2	76.1	3.8	42.1	700		
Rural	86.9	86.2	82.4	76.7	88.0	84.3	78.4	75.9	69.8	11.2	40.8	775		
<b>Region</b>														
Metro Manila	95.0	95.0	93.3	84.9	96.6	94.1	84.0	81.5	73.1	3.4	37.0	225		
Cordillera Admin.	90.4	90.4	83.1	80.7	90.4	86.7	81.9	80.7	75.9	7.2	36.1	29		
Ilocos	85.9	85.9	78.9	69.0	85.9	78.9	71.8	70.4	60.6	14.1	28.2	69		
C. Valley	87.0	87.0	85.5	82.6	88.4	88.4	82.6	84.1	82.6	11.6	29.0	46		
C. Luzon	97.9	96.8	95.7	81.9	98.9	94.7	86.2	84.0	75.5	1.1	35.1	139		
S. Tagalog	89.8	87.6	85.4	81.0	89.8	86.1	82.5	73.0	70.8	9.5	35.8	222		
Bicol	87.4	88.4	80.0	74.7	90.5	80.0	74.7	74.7	68.4	9.5	48.4	90		
W. Visayas	96.7	95.6	90.0	86.7	97.8	93.3	87.8	93.3	86.7	2.2	62.2	107		
C. Visayas	93.7	95.5	93.7	90.1	94.6	93.7	87.4	86.5	77.5	4.5	59.5	122		
E. Visayas	82.5	83.3	77.5	71.7	85.8	81.7	75.0	71.7	62.5	12.5	46.7	86		
W. Mindanao	81.4	80.4	76.5	71.6	81.4	77.5	73.5	74.5	69.6	18.6	33.3	56		
N. Mindanao	94.2	95.2	92.3	87.5	96.2	95.2	87.5	76.9	74.0	3.8	36.5	64		
S. Mindanao	96.6	96.6	95.4	92.0	96.6	95.4	92.0	83.9	82.8	3.4	57.5	82		
C. Mindanao	87.8	86.5	79.7	77.0	86.5	83.8	78.4	77.0	71.6	12.2	32.4	46		
ARMM	65.1	59.6	56.9	50.5	59.6	56.9	50.5	50.5	46.8	33.9	22.0	52		
Caraga	93.3	93.3	91.0	85.4	98.9	92.1	87.6	87.6	78.7	1.1	43.8	40		
<b>Mother's education</b>														
No education	49.0	46.8	41.4	36.4	44.6	43.0	38.0	32.1	32.1	47.3	27.6	22		
Elementary	84.7	82.6	78.2	70.0	86.2	80.7	72.9	70.7	62.5	12.9	42.3	470		
High school	93.4	93.8	91.3	85.0	94.6	92.0	85.6	81.6	76.4	5.2	43.8	581		
College or higher	96.2	96.5	93.4	90.0	96.5	93.5	88.8	87.2	81.9	3.0	37.7	402		
Total	90.8	90.3	87.0	80.9	91.7	88.1	81.7	78.9	72.8	7.7	41.4	1,474		

Among the children who did not receive all the basic immunizations in the first year of life, the reasons for non-immunization are given in Table 8.13. The major obstacles to completing the basic immunization regime appears to be the inconvenience of getting to a health facility or finding the time to take the child to the clinic.

Table 8.13 Reasons for non-immunization

Percentage of children 12-23 months who did not receive all basic immunization in the first year of life by reasons for non-immunization, Philippines 1998

Reason	Percent
Unaware of need for immunization	4.3
Unaware of need to return for second or third dose	2.2
Fear of side effects, wrong ideas about contraindications	9.2
Postponed until another time	6.9
No faith in immunization	5.5
Rumors	1.3
Place of immunization too far	15.5
Time for immunization inconvenient	2.6
Vaccinator absent	2.0
Mother too busy	13.2
Family problem, including illness of mother	1.3
Child ill - not brought	9.9
Child ill - brought but not given immunization	1.8
Long waiting time	1.0
Other	10.5
No reason given	29.7
Number of children	289

## 8.8 Prevalence of Acute Respiratory Infection and Fever

Acute respiratory infection is still the leading cause of death among children under 5. The 1998 NDHS results show that 13 percent of children under 5 had cough with rapid breathing in the two weeks prior to the survey (Table 8.14). Children 12 to 23 months, children of birth order 6 or higher, and children in rural areas are slightly more likely to have been reported to have respiratory problems. High levels of cough with rapid breathing are found in CAR.

Among children who were ill with cough and rapid breathing, 58 percent were taken to a health facility. The percentage of children who were taken to a health facility is higher for younger children, those of lower birth order, those in urban areas, and those whose mothers have more education.

Various infectious diseases are accompanied by fever. In the Philippines, the most common diseases with fever are measles, respiratory infections, typhoid, and dengue. Information about the prevalence of fever among children under five was collected in the survey although the cause was not investigated. Table 8.14 provides information on the presence of fever and cough accompanied by rapid breathing. Overall, one in four children under five had fever in the two weeks prior to the survey. Variations in the percentage of children with fever are generally small across subgroups; the highest levels, one-third or more, are found among children aged 6-23 months. Prevalence of fever ranges from 17 percent of children under five in ARMM to 32 percent of those in CAR.

**Table 8.14 Prevalence of acute respiratory infection**

Percentage of children under five years of age who were ill with a cough with rapid breathing (ARI) and the percentage who were ill with fever during the two weeks before the survey, by socioeconomic and demographic characteristics, Philippines 1998

Background characteristic	Children with cough and rapid breathing (ARI)	Children with ARI taken to a health facility	Children with fever	Number of children
<b>Child's age</b>				
Under 6 months	10.8	62.3	20.8	736
6-11 months	14.2	75.2	39.7	759
12-23 months	18.1	60.0	33.9	1,474
24-35 months	14.9	51.7	24.6	1,446
36-47 months	11.8	52.7	20.5	1,415
48-59 months	8.8	53.1	19.8	1,455
<b>Child's sex</b>				
Male	13.5	60.9	26.1	3,821
Female	13.0	54.4	25.7	3,463
<b>Birth order</b>				
1	11.7	66.5	24.2	1,851
2-3	12.9	61.1	25.5	2,768
4-5	12.9	54.2	26.4	1,485
6+	17.1	46.4	28.9	1,181
<b>Residence</b>				
Urban	11.7	64.5	24.9	3,359
Rural	14.6	53.3	26.7	3,926
<b>Region</b>				
Metro Manila	12.4	70.1	23.2	1,020
Cordillera Admin.	25.6	64.4	32.4	143
Ilocos	13.2	64.4	21.9	332
Cagayan Valley	21.9	55.8	27.4	232
C. Luzon	14.1	53.8	28.1	686
S. Tagalog	11.5	59.5	28.8	1,044
Bicol	15.1	53.1	30.5	505
W. Visayas	13.9	46.3	26.8	571
C. Visayas	7.5	66.7	22.8	573
E. Visayas	20.2	51.7	28.6	418
W. Mindanao	11.7	59.7	20.9	290
N. Mindanao	10.3	67.9	20.5	319
S. Mindanao	15.8	57.0	31.9	469
C. Mindanao	8.6	54.3	23.9	253
ARMM	5.0	38.5	16.8	246
Caraga	17.9	47.3	22.3	184
<b>Mother's education</b>				
No education	12.6	56.9	18.6	152
Elementary	15.6	46.7	28.6	2,448
High school	13.1	66.7	26.2	2,820
College or higher	10.5	63.1	22.5	1,866
Total	13.3	57.9	25.9	7,286

## **8.9 Diarrheal Diseases**

Mothers with children under five years of age were asked if their children had diarrhea at any time in the two weeks prior to the interview and if they had diarrhea in the past 24 hours. Mothers were also asked about any action taken to treat their children. The 1998 NDHS data indicate that 1 in 14 children under five was reported as having diarrhea during the 2-week period before the survey, and less than 1 percent had bloody diarrhea in that period (Table 8.15). A slight decline in the prevalence of diarrhea is noted since 1993, from 10 to 7 percent.

The prevalence of diarrhea generally varies only slightly by background characteristics. The most significant variation is by age and region. Prevalence is somewhat higher for children 6-23 months than for younger or older children. Considering regional variations, Table 8.15 shows that the prevalence of diarrhea is higher in Eastern Visayas and CAR than in other regions.

## **8.10 Treatment of Diarrhea with Oral Rehydration Therapy**

The level of knowledge of ORS (prepackaged oral rehydration salts) to treat diarrhea is shown in Table 8.16. In the 1998 NDHS, a mother is classified as knowing about ORS if she reported using ORS packets to treat one of her children for diarrhea in the two-week period prior to the survey, or if she has ever seen or heard of ORS packets.

A large majority of mothers (93 percent) know about ORS packets. There are significant variations in the levels of ORS knowledge by age, region, and education; teenage mothers, mothers with no education, and those in ARMM are the least likely to know about ORS packets. Knowledge is over 30 percentage points higher among educated mothers than mothers with no education.

It is encouraging to note that almost three-quarters of Filipino mothers know that children with diarrhea should be given more to drink than usual. Fourteen percent say such children should be given the same amount to drink, while 13 percent say they should be given less to drink, a practice that could result in increased dehydration of the child. Half of mothers of young children believe that children with diarrhea should receive less to eat than usual, while 28 percent believe children should be given the same amount and 24 percent believe children should be given more to eat.

**Table 8.15 Diarrhea prevalence**

Percentage of children under five years of age who had diarrhea and bloody diarrhea in the two weeks preceding the survey, and the percentage with diarrhea in the 24 hours before the survey, by selected background characteristics, Philippines 1998

Background characteristic	Diarrhea in the preceding 2 weeks		Number of children
	All diarrhea <sup>1</sup>	Diarrhea in preceding 24 hours	
<b>Child's age</b>			
Under 6 months	6.2	0.1	736
6-11 months	13.9	1.6	759
12-23 months	13.4	0.4	1,474
24-35 months	5.9	0.8	1,446
36-47 months	3.7	0.4	1,415
48-59 months	3.6	0.3	1,455
<b>Child's sex</b>			
Male	7.7	0.7	3,823
Female	7.1	0.3	3,463
<b>Birth order</b>			
1	7.2	0.4	1,851
2-3	7.3	0.6	2,768
4-5	7.1	0.4	1,486
6+	8.5	0.7	1,181
<b>Region</b>			
Metro Manila	5.6	0.6	1,020
Cordillera Admin.	12.0	0.7	143
Ilocos	6.7	0.3	332
Cagayan Valley	9.1	0.6	232
C. Luzon	5.8	0.4	686
S. Tagalog	7.0	0.5	1,044
Bicol	7.7	0.2	505
W. Visayas	9.1	0.2	571
C. Visayas	5.8	0.2	573
E. Visayas	13.0	1.2	418
W. Mindanao	7.1	0.8	290
N. Mindanao	5.2	0.8	319
S. Mindanao	9.0	1.2	469
C. Mindanao	8.6	0.5	253
ARMM	6.2	0.2	246
Caraga	7.3	0.7	184
<b>Mother's education</b>			
No education	6.5	0.0	152
Elementary	8.4	0.6	2,448
High school	7.3	0.6	2,820
College or higher	6.4	0.4	1,866
Total	7.4	0.5	7,286

<sup>1</sup>Includes diarrhea in the preceding 24 hours

**Table 8.16 Knowledge of diarrhea care**

Percentage of mothers with births in the last five years who know about ORS packets and appropriate feeding practices during diarrhea, according to demographic and background characteristics, Philippines 1998

Background characteristic	Percentage who know about ORS packets	Appropriate feeding practices during diarrhea								Number of women	
		Fluids				Solid foods					
		Reduced fluid intake	Same amount of fluid	Increased fluid intake	Don't know/missing	Reduced food intake	Same amount of food	Increased food intake	Don't know/missing		
<b>Age group</b>											
15-19	81.6	19.3	18.3	59.2	3.3	41.3	31.6	24.3	2.9	160	
20-24	91.4	16.3	12.9	70.4	0.4	44.5	28.1	26.5	0.9	855	
25-29	93.1	11.0	14.1	73.7	1.2	46.9	27.5	24.5	1.1	1,378	
30-34	94.6	10.6	16.0	73.0	0.4	47.5	29.4	22.9	0.2	1,211	
35+	92.0	13.0	12.5	74.2	0.3	50.9	26.9	21.6	0.5	1,363	
<b>Residence</b>											
Urban	93.4	9.4	13.1	76.9	0.6	49.7	27.9	21.8	0.6	2,380	
Rural	91.7	15.6	15.0	68.7	0.8	45.6	28.2	25.3	0.9	2,588	
<b>Region</b>											
Metro Manila	92.0	4.7	14.0	80.6	0.8	55.8	23.3	20.2	0.8	732	
Cordillera Admin.	97.3	10.5	12.8	75.9	0.8	31.1	28.8	38.9	1.2	90	
Ilocos	90.4	26.8	21.5	51.3	0.4	53.9	25.0	21.1	0.0	221	
C. Valley	92.5	20.5	16.4	61.2	1.9	41.8	30.6	26.1	1.5	177	
C. Luzon	94.2	10.3	7.6	81.8	0.3	54.8	20.3	23.9	0.9	490	
S. Tagalog	90.5	3.5	6.2	89.8	0.5	46.1	25.9	27.8	0.2	701	
Bicol	95.6	16.0	16.0	66.8	1.2	49.6	25.4	25.6	1.5	324	
W. Visayas	97.3	6.9	11.7	80.8	0.6	43.1	35.5	20.8	0.6	393	
C. Visayas	95.1	15.4	14.0	70.3	0.3	52.6	32.8	14.0	0.6	379	
E. Visayas	96.5	16.8	14.4	68.8	0.0	39.3	31.2	29.3	0.3	265	
W. Mindanao	87.0	26.1	17.3	55.1	1.6	50.3	25.0	23.4	1.3	205	
N. Mindanao	96.6	18.2	18.8	62.0	0.9	39.2	28.6	31.8	0.3	200	
S. Mindanao	90.4	16.4	18.7	64.6	0.3	43.6	36.3	19.3	0.8	332	
C. Mindanao	93.8	15.6	23.6	60.1	0.7	31.5	35.9	31.9	0.7	172	
ARMM	71.6	23.7	22.8	50.9	2.7	42.5	29.9	24.6	3.0	159	
Caraga	93.7	17.4	20.9	61.7	0.0	46.3	30.3	23.3	0.0	128	
<b>Mother's education</b>											
No education	57.9	27.1	18.8	50.9	3.2	46.2	25.4	24.7	3.7	101	
Elementary	91.5	15.9	16.1	67.5	0.7	47.5	29.1	22.7	0.7	1,598	
High school	94.2	11.7	13.4	74.3	0.6	48.4	26.5	24.7	0.5	1,920	
College or higher	93.9	9.0	12.2	78.1	0.7	46.6	29.2	23.3	0.9	1,349	
Total	92.5	12.6	14.1	72.6	0.7	47.5	28.0	23.7	0.8	4,968	

ORS = Oral rehydration salts

Table 8.17 examines in detail the treatment approaches that were adopted for children who were reported to have experienced a diarrhea episode during the two-week period before the survey. Medical treatment was sought for 44 percent of these children. Children who had diarrhea were either treated with ORS packets (43 percent) or recommended home fluids (RHF) such as sugar-salt-water solution, or rice water (am soup) (49 percent). Overall, 65 percent received either ORS or RHF. While 3 in every 5 children who had diarrhea were given increased fluids, it is interesting to note that 18 percent were given neither increased fluids nor ORS. Eighty-four percent of children received home remedies.

The use of oral rehydration therapy appears to have increased. In 1993, only 27 percent of children with diarrhea were treated with solutions made from ORS packets compared to 43 percent in 1998. Similarly, in 1993, only 36 percent of ill children were treated with homemade solutions compared to 49 percent in 1998.

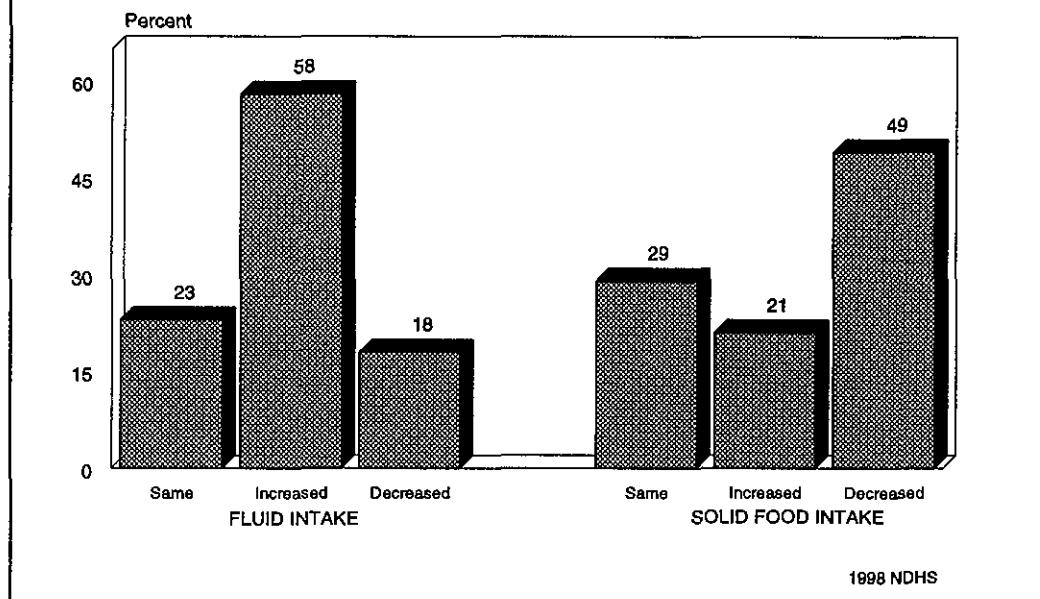
Table 8.17 Diarrhea treatment

Percentage of children under five who had diarrhea in the past two weeks who were taken for treatment to a health facility or provider and the forms of treatment given, Philippines 1998

Diarrhea treatment	Percent
Percentage of children with diarrhea taken to a health facility	43.9
ORS packets	43.4
Recommended home fluids (RHF)	49.3
Either ORS or RHF	64.1
Increased fluids	58.3
No ORS, RHF, increased fluids	18.4
Injection	0.6
Home remedy	83.4
None	1.9
Missing	4.0
Number of children with diarrhea	539

Figure 8.6 looks at the extent to which feeding practices were changed for children with diarrhea in the two weeks prior to the survey. With regard to consumption of fluids during children's diarrhea, mothers reported that they gave the same amount of fluids to 23 percent of children, and increased fluids for 58 percent. However, nearly one-fifth of children were given less fluids. With regard to consumption of food, half of the mothers with children ill with diarrhea reported giving the children less food than usual, while 21 percent said they increased feeding and 29 percent reported giving the same amount of food as usual.

**Figure 8.6**  
**Feeding Practices among Children under Five with Diarrhea**



Mothers with children under five years were asked about their children's intake of supplementary vitamin A and iron during the six months preceding the survey. Results in Table 8.18 reveal that 71 percent of children were given vitamin A capsules. A little over half of these children were provided with iron preparations. Infants who are of birth order 6 and above, rural children and those with uneducated mothers were less likely to be given the above micronutrients. The regional distribution indicates that ARMM has consistently low coverage for the micronutrients for children.

Table 8.18 Treatment with vitamin A and iron

Percentage of children under five years who received a vitamin A capsule or iron drops/syrup during the six months preceding the survey, by selected background characteristics, Philippines 1998

Background characteristic	Children under five		
	Received vitamin A capsule	Received iron drops/ syrup	Number of children
<b>Child's age</b>			
6-11 months	80.9	67.7	1,495
12-23 months	76.9	60.5	1,474
24-35 months	81.1	63.3	1,446
36-47 months	78.0	61.7	1,415
48-59 months	77.4	62.8	1,455
<b>Child's sex</b>			
Male	70.3	55.8	3,823
Female	70.9	57.0	3,463
<b>Birth order</b>			
1	70.6	59.6	1,851
2-3	72.6	59.0	2,768
4-5	71.2	55.2	1,486
6+	65.1	46.4	1,181
<b>Residence</b>			
Urban	72.9	63.4	3,360
Rural	68.7	50.3	3,926
<b>Region</b>			
Metro Manila	72.5	67.0	1,020
Cordillera Admin.	74.0	47.9	143
Ilocos	68.4	64.3	332
Cagayan Valley	68.4	45.6	232
C. Luzon	70.3	63.2	686
S. Tagalog	70.0	59.7	1,044
Bicol	75.3	59.6	505
W. Visayas	75.5	55.8	571
C. Visayas	73.3	53.6	573
E. Visayas	68.6	35.2	418
W. Mindanao	68.2	58.5	290
N. Mindanao	74.1	42.9	319
S. Mindanao	76.4	62.9	469
C. Mindanao	71.4	57.4	253
ARMM	31.8	23.5	246
Caraga	70.0	53.3	184
<b>Mother's education</b>			
No education	29.6	17.6	152
Elementary	67.5	45.8	2,448
High school	74.7	61.9	2,820
College or higher	71.7	64.8	1,866
Total	70.6	56.3	7,286



# **CHAPTER 9**

## **INFANT FEEDING AND SUPPLEMENTATION**

The importance of proper infant feeding cannot be overemphasized as it affects children's nutritional health and well being. Hence, the Philippines in urgent response to the 1981 International Code of Marketing of Breastmilk Substitute by the World Health Organization (WHO) advocated a strong campaign to encourage breastfeeding among nursing mothers instead of using breast milk substitutes. Breastfeeding with all its healthful and economic advantages is the best form of feeding during the first six months of infancy. Supplementary foods introduced initially at four to six months of infancy greatly contribute to the nutritional needs of the growing child. Thus, proper and adequate infant feeding, starting at birth, is very important for physical and mental development of a child.

### **9.1 Prevalence of Breastfeeding and Supplementation**

Breastfeeding is not universal in the Philippines; 12 percent of children born in the five years before the survey were not breastfed at all (see Table 9.1). The extent of breastfeeding does not vary by sex of child, but urban children are less likely to be breastfed than rural children (83 percent compared to 92 percent). Observing regional variations, children in Metro Manila are the least likely and children in CAR the most likely to be breastfed. Mother's education has a negative association with their children's chances of being breastfed. While 94 percent of children of mothers who have no education were breastfed, only 81 percent of children whose mothers have been to college ever received breast milk. Children of mothers who received assistance from medical personnel at delivery and children who were born in a health facility are less likely to be breastfed than those who were delivered by a traditional midwife or were born at home.

The first breast milk, or colostrum, is beneficial to infants because it contains a high concentration of antibodies that protect children against certain infectious diseases. However, in some places, cultural norms dictate against giving infants colostrum. Results from the 1998 NDHS show that 41 percent of children born during the five years before the survey were given breast milk during the first hour after birth, and 79 percent were given breast milk during the first 24 hours.

Differentials in the early initiation of breast milk appear to exhibit a pattern similar to that of prevalence; rural infants and infants of mothers with no education are slightly more likely to be given breast milk soon after birth. The percentage of children receiving colostrum on Luzon Island, except in the Cordillera Administrative Region and Cagayan Valley, tends to be lower than in other parts of the country. It is interesting to note that children in Metro Manila are the least likely to be given breast milk, but children in Bicol are the least likely to be breastfed immediately after birth.

Table 9.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and the percentage of last-born children who started breastfeeding within one hour of birth and within one day of birth, by selected background characteristics, Philippines 1998

Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding:		Number of children
		Within 1 hour of birth	Within 1 day of birth	
<b>Sex</b>				
Male	87.1	40.0	77.7	3,974
Female	89.0	41.1	79.6	3,592
<b>Residence</b>				
Urban	83.1	38.8	75.4	3,465
Rural	92.2	41.8	81.0	4,101
<b>Region</b>				
Metro Manila	79.6	33.6	71.0	1,048
Cordillera Admin.	95.3	73.8	91.1	149
Ilocos	85.9	37.2	72.0	344
Cagayan Valley	90.4	51.7	69.2	242
C. Luzon	84.3	33.9	73.8	711
S. Tagalog	87.2	26.8	77.4	1,078
Bicol	92.7	18.1	75.6	530
W. Visayas	92.7	48.3	88.4	585
C. Visayas	93.4	58.1	84.3	586
E. Visayas	90.7	54.4	83.3	446
W. Mindanao	90.7	54.2	79.1	304
N. Mindanao	90.9	50.5	88.1	331
S. Mindanao	88.1	43.8	75.2	489
C. Mindanao	87.2	43.1	84.0	264
ARMM	88.1	41.6	78.5	263
Caraga	89.1	35.6	83.7	197
<b>Mother's education</b>				
No education	93.7	49.9	84.8	169
Elementary	93.0	40.7	81.3	2,586
High school	87.5	39.5	79.7	2,913
College or higher	81.4	41.0	71.8	1,898
<b>Assistance at delivery</b>				
Medically trained personnel	84.3	39.5	75.7	4,268
Traditional midwife	92.5	41.3	82.3	3,124
Other/None	97.1	54.1	85.4	157
<b>Place of delivery</b>				
Health facility	83.1	40.7	73.8	2,590
At home	90.6	40.6	81.2	4,953
Total	88.0	40.5	78.6	7,566

For children born in the five years prior to the survey who were currently breastfed, mothers were asked if they had given various types of liquids or solid foods to the child "yesterday" or "last night." Children who are *exclusively* breastfed are defined as receiving breast milk only, while *full* breastfeeding is defined as receiving breast milk and plain water only. The results shown in Table 9.2 indicate that, children in the Philippines are introduced to supplemental foods very early; among newborns under 2 months, one in seven is not breastfed, and 19 percent are receiving supplementary foods in addition to breast milk. More than half of newborns are exclusively breastfed. At age 6-7 months, the majority of infants receive supplementary foods; the percentage of children who are not breastfed increases to one in three children, while the percentage of children who are exclusively breastfed dropped to 2.3 percent. At age 6 months and older, virtually all infants have received foods other than breast milk (Figure 9.1).

Table 9.2 Breastfeeding status

Percent distribution of living children under age three by breastfeeding status, according to child's age in months, Philippines 1998

Age in months	Percentage of children who are:					Number of living children	
	Breastfed and given:				Total		
	Not breast-fed	Exclusively breast-fed	Plain water only	Supplements			
< 2	15.2	57.7	7.9	19.2	100.0	186	
2-3	20.2	40.1	8.8	30.9	100.0	271	
4-5	32.1	20.0	9.7	38.2	100.0	278	
6-7	34.7	2.3	2.0	60.9	100.0	287	
8-9	40.3	0.4	0.9	58.4	100.0	228	
10-11	37.2	0.1	0.1	62.6	100.0	244	
12-13	47.9	0.7	0.3	51.1	100.0	221	
14-15	56.2	0.3	0.0	43.4	100.0	279	
16-17	63.3	0.0	0.4	36.4	100.0	274	
18-19	68.2	0.0	0.0	31.8	100.0	258	
20-21	73.8	0.0	0.0	26.2	100.0	219	
22-23	79.8	0.4	0.0	19.7	100.0	223	
24-25	81.2	0.0	0.0	18.8	100.0	241	
26-27	91.2	0.0	0.0	8.8	100.0	242	
28-29	94.2	0.0	0.0	5.8	100.0	278	
30-31	90.8	0.0	0.0	9.2	100.0	230	
32-33	92.0	0.0	0.0	8.0	100.0	243	
34-35	92.7	0.4	0.0	6.8	100.0	212	
0-2	18.2	47.2	8.5	26.1	100.0	458	
4-6	32.6	14.5	7.3	45.6	100.0	414	
7-9	38.5	0.8	1.2	59.5	100.0	379	

**Figure 9.1**  
**Distribution of Children by Breastfeeding (BF)**  
**Status According to Age**

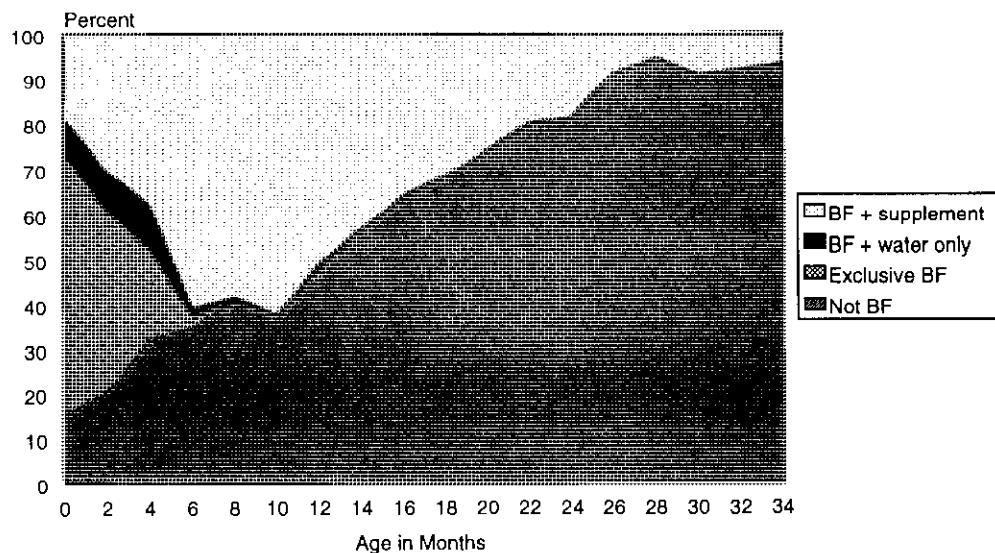


Table 9.3 shows the type of supplements given to children under age three. Among breastfeeding children age 2-3 months, 26 percent are given infant formula, 7 percent receive milk other than breast milk, and 17 percent are given other liquids. (Other liquids consists of water, tea, rice water or fruit juice.) By the time infants are 4-5 months, the pattern of feeding has changed dramatically; 12 percent have been introduced to meat, fish and eggs, 32 percent are receiving grains, flour or cereal and 9 percent are given tubers and plantains.

Bottles with nipples are usually used in conjunction with infant formula, but they are also used with other types of supplementary food. The use of a bottle is not generally recommended at early stages of infancy due to the risk of exposing the child to the harmful effects of insufficient and unhygienic preparation of the liquid, particularly in poor environmental and socioeconomic conditions. In particular, since it is difficult to thoroughly clean feeding bottles, their use is thought to place children at increased risk of developing diarrhea or other diseases. Among breastfeeding newborns, 23 percent have already used a bottle with a nipple. The percentage of children who were given a bottle with a nipple increases until age 8-9 months, after which the percentage gradually declines.

**Table 9.3 Type of foods received by breastfeeding children in the preceding 24 hours**

Percentage of breastfeeding children under 36 months of age by type of food received in the 24 hours before the interview and the percentage using a bottle with a nipple, by number of months since child's birth, Philippines 1998

Months since birth	Breast milk only	Infant formula milk	Supplementation						Percentage using bottle with a nipple	Number of children
			Other milk	Other liquid	Meat, fish	Grain, flour, eggs	Tubers	Other		
< 2	68.0	22.7	0.3	3.7	0.0	1.0	0.0	0.0	22.9	158
2-3	50.2	26.3	7.4	16.8	3.4	6.6	3.0	2.5	35.5	217
4-5	29.5	27.8	9.4	28.4	12.3	32.6	9.0	7.4	34.2	189
6-7	3.6	36.1	21.2	46.1	52.1	77.6	30.8	32.0	45.9	187
8-9	0.7	34.3	27.3	55.1	69.3	84.6	37.6	46.4	47.5	136
10-11	0.2	17.8	28.3	62.9	81.6	96.2	48.9	44.7	27.0	153
12-13	1.3	17.2	36.6	68.6	82.7	94.2	52.5	57.9	36.6	115
14-15	0.8	20.3	39.7	65.0	89.7	95.3	50.9	64.9	31.8	122
16-17	0.0	21.9	40.4	71.4	92.1	91.7	59.7	59.5	34.0	101
18-23	0.5	8.9	42.8	74.1	89.5	96.4	60.2	63.9	29.3	184
24-29	0.0	13.8	40.7	83.1	96.1	92.2	61.5	72.1	29.8	83
30-35	1.7	5.2	58.6	81.5	93.1	94.6	64.2	73.8	29.3	56
0-3	57.7	24.8	4.4	11.3	2.0	4.3	1.8	1.5	30.2	375
4-6	21.5	30.1	12.6	34.9	22.1	44.8	14.6	12.7	38.2	279
7-9	1.3	35.4	25.4	51.2	65.8	83.7	36.5	43.5	46.6	233
Total	16.7	22.6	25.2	49.2	55.4	65.1	34.7	37.4	34.2	1,701

## 9.2 Duration of Breastfeeding

The median duration and the frequency of breastfeeding according to selected background characteristics are presented in Table 9.4. The estimates of mean and median durations are based on current status data, that is, the proportions of children under 3 years of age who were being breastfed at the time of the survey, as opposed to the retrospective data on the length of breastfeeding of older children who are no longer breastfed. The prevalence/incidence mean is provided for the total population in order to allow for international comparison.

The median duration of breastfeeding is 13 months. Children who live in rural areas are breastfed about 10 months longer than children in urban areas. Children whose mothers have no education are breastfed 3 times as long as children whose mothers have college or higher education (15 months compared to 5 months). Mothers assisted by traditional midwives at delivery also breastfeed longer than those assisted by medically trained personnel at delivery. There is little difference in breastfeeding duration by sex of children; although girls receive breast milk slightly longer than boys.

The median duration of exclusive breastfeeding is very short in the Philippines, only a month and a half. The differentials in duration of exclusive breastfeeding and full breastfeeding are similar to those for breastfeeding in general.

The duration of postpartum amenorrhea is affected by both the duration and the frequency of breastfeeding. Children's health and nutritional status are also affected by the frequency of breastfeeding. Frequent breastfeeding is fairly common in the Philippines; 7 in 10 children under 6 months were breastfed six times or more in the 24 hours preceding the interview. Differentials in the frequency of breastfeeding are similar to those for breastfeeding prevalence, initiation, and supplementation.

**Table 9.4 Median duration and frequency of breastfeeding**

Median duration of any, exclusive, and full breastfeeding among children under 3 years and the percentage of children under 6 months of age who were breastfed 6 or more times in the 24 hours preceding the interview, according to background characteristics, Philippines 1998

Background characteristic	Among children <3 years, median duration of breastfeeding in months			Number of children <3 years	Percentage <6 mo. breastfed 6+ times in last 24 hours	Number of living children < 6 months
	Any breast-feeding	Exclusive breast-feeding	Full breast-feeding <sup>1</sup>			
<b>Sex of child</b>						
Male	11.6	0.7	1.7	2,405	68.9	394
Female	13.5	1.8	2.4	2,161	73.3	341
<b>Residence</b>						
Urban	5.6	0.7	0.8	2,108	58.6	331
Rural	15.5	2.1	2.8	2,459	81.0	405
<b>Region</b>						
Metro Manila	3.4	0.5	0.6	624	51.9	102
Cordillera Admin.	16.7	3.1	3.4	86	(87.5)	14
Ilocos	18.2	2.8	2.8	204	(75.8)	32
Cagayan Valley	13.9	3.5	3.6	140	(92.9)	19
C. Luzon	10.1	1.3	1.3	450	56.0	74
S. Tagalog	12.9	0.6	0.8	648	64.0	122
Bicol	15.6	2.8	3.1	330	88.9	51
W. Visayas	14.0	1.0	2.1	341	(72.1)	51
C. Visayas	14.0	1.7	2.4	361	87.5	62
E. Visayas	15.3	2.3	3.2	279	80.8	37
W. Mindanao	16.6	2.4	2.8	178	(89.1)	25
N. Mindanao	12.2	1.9	3.2	199	78.6	35
S. Mindanao	8.3	1.8	2.4	299	(61.7)	44
C. Mindanao	7.8	0.7	2.6	153	(63.9)	22
ARMM	15.1	3.4	3.4	151	85.5	26
Caraga	12.9	2.2	4.5	123	(81.8)	20
<b>Education</b>						
No education	15.4	2.3	2.9	97	(81.9)	17
Elementary	17.2	2.2	2.9	1,492	84.4	233
High school	12.6	1.5	2.2	1,767	73.0	282
College or higher	4.6	0.6	0.8	1,210	51.7	203
<b>Delivery assistance</b>						
Medically trained personnel	6.5	0.8	1.4	2,627	61.1	416
Traditional midwife	16.7	2.1	3.0	1,844	83.2	310
Total	12.8	1.4	2.1	4,566	70.9	736
Mean	13.7	2.9	3.4	88.6	NA	NA
Prevalence/Incidence	13.2	2.2	2.8	NA	NA	NA

Note: Children for whom assistance at delivery is missing, "other," or "none" are excluded. Figures in parentheses are based on 25 to 49 unweighted cases.

NA=Not applicable

<sup>1</sup>Either exclusive breastfeeding or received plain water only in addition to breast milk.

## **CHAPTER 10**

### **GENERAL HEALTH**

This chapter contains subject matter related to some health programs of the Department of Health. These include some data that help in evaluating the information and education campaigns conducted for topics related to lifestyle, smoking, cancer, communicable diseases (dengue fever, leprosy, tuberculosis, rabies), traditional medicine, environmental health, and health care financing.

The unit of analysis in this section refers to the person who answered questions relating to the household. No attempt was made to select adults at random. Thus, the data cannot be interpreted as relating to all adults but rather to one respondent per household.

#### **10.1 Communicable Diseases**

##### **Dengue Fever**

The Dengue Control Program is one of the newer health programs of the Department of Health and involved launching a massive information and education campaign to prevent the spread of dengue in the country. To help assess the effectiveness of this campaign, respondents were asked whether they were aware of dengue fever and whether they knew how to keep from getting this disease. The results of the NDHS show that 9 out of 10 household respondents have heard about dengue fever. While the general awareness is high, the level of awareness in different regions varies from as high as 99 percent in Metro Manila to as low as 76 percent in Western Mindanao. Table 10.1 provides the data.

Removing breeding places of mosquitoes was mentioned by 2 in 3 household respondents as a means of preventing dengue fever. Almost 40 percent of household respondents know that mosquito nets can prevent the spread of dengue fever. As shown in Table 10.1, many misconceptions about dengue prevention still exist among the general public. These include avoiding people with dengue fever, taking medicines, washing hands before eating, and eliminating flies. Again, respondents from Metro Manila are more knowledgeable on dengue prevention while those from CAR are the least knowledgeable.

##### **Rabies**

Prevention of rabies in the country emphasizes not only the giving of vaccines to people bitten by animals (mainly dogs) but also the major role of dog owners in preventing this dreaded disease. Household respondents were asked what they think dog owner's responsibilities are. Respondents in half of the households are aware that dog owners have a responsibility to immunize their dogs and restrain their dogs. One out of 7 respondents feels that it is a dog owner's responsibility to provide treatment to victims bitten by their dog and one out of 7 believes that they have no responsibility at all. Metro Manila residents are more knowledgeable about responsible dog ownership compared with the rest of the regions (Table 10.2).

**Table 10.1 Dengue fever**

Percentage of household respondents who have heard of dengue fever and percentage who report various means of protecting against it, by region, Philippines 1998

Region	Percentage who have heard of dengue	Means of protecting against dengue fever								Number of household respondents	
		Avoid people with dengue fever	Remove breeding places of mosquitos	Take medi- cines	Use mos- quito nets	Wash hands before eating	Elimi- nate flies	Other	None		
Metro Manila	98.9	5.9	81.8	2.8	22.7	5.2	49.5	19.6	0.4	0.6	1,859
Cordillera Admin.	76.6	1.0	35.9	1.8	30.2	1.1	8.6	29.9	1.3	4.8	212
Ilocos	91.2	6.1	62.4	2.6	44.1	2.4	16.6	18.6	0.2	2.1	667
Cagayan Valley	92.8	2.9	47.0	5.5	62.0	1.3	12.0	37.0	0.4	0.7	475
C. Luzon	95.9	5.7	73.0	1.5	34.9	3.7	35.2	11.5	0.4	2.0	1,292
S. Tagalog	91.5	2.3	79.1	0.7	37.7	3.7	14.4	11.6	0.2	1.4	1,818
Bicol	81.4	2.1	54.6	2.6	27.1	3.2	26.4	19.2	0.5	1.8	740
W. Visayas	88.4	2.5	65.8	2.0	28.8	2.4	19.8	29.1	0.4	2.0	1,027
C.Visayas	92.5	4.8	58.5	5.3	41.3	1.1	18.4	37.1	0.6	0.4	959
E. Visayas	84.3	1.6	46.8	0.6	46.5	0.4	15.3	35.9	0.4	1.2	620
W. Mindanao	76.2	6.8	56.5	6.0	44.7	3.8	17.3	20.1	0.2	1.4	466
N. Mindanao	89.0	3.4	49.5	2.9	44.6	2.1	23.2	26.9	0.3	2.4	427
S. Mindanao	94.2	2.8	59.2	2.3	37.1	2.1	36.8	40.9	0.6	2.6	797
C. Mindanao	92.9	4.8	66.5	2.9	46.2	1.9	24.1	16.5	1.1	1.9	406
ARMM	79.4	14.2	62.2	8.3	52.9	5.0	30.9	6.3	0.5	1.7	322
Caraga	93.8	6.7	65.8	5.8	65.8	1.2	27.6	21.9	0.1	0.7	314
Total	91.0	4.3	65.9	2.8	37.5	3.0	26.2	22.6	0.4	1.7	12,401

For households with a member bitten by a dog within the 3 months before the survey, the respondents were asked what was done to treat the dog bite. Thirty-seven percent reported that the bite was washed with soap and water (Table 10.3). Only 26 percent said that consultations were made with physicians or the victim went to the health center, while 9 percent said that they observed the dog. It is interesting to note that local practices such as applying garlic on the bite site and seeking assistance from traditional healers are still very common.

**Table 10.2 Responsibility of dog owners**

Percentage of household respondents who report specific responsibilities of dog owners, by region, Philippines 1998

Region	Responsibility of dog owners					Number of household respondents
	Immu-nize dog	Restrain dog within the yard	Provide treatment for the dog bite victim	Other	None	
Metro Manila	68.6	48.9	4.6	7.6	6.8	1,859
Cordillera Admin.	29.9	35.7	6.1	14.7	29.7	212
Ilocos	28.2	38.8	29.4	4.7	16.4	667
Cagayan Valley	29.9	40.7	21.3	6.7	22.9	475
C. Luzon	56.8	34.2	7.8	4.0	17.8	1,292
S. Tagalog	53.6	63.4	3.6	2.4	8.4	1,818
Bicol	36.3	61.0	9.9	2.8	17.4	740
W. Visayas	47.3	41.8	15.0	6.6	15.0	1,027
C. Visayas	47.6	50.4	24.5	6.4	10.6	959
E. Visayas	33.2	45.7	34.7	4.0	15.8	620
W. Mindanao	51.6	57.2	24.8	4.9	11.2	466
N. Mindanao	48.5	31.6	16.3	1.5	19.8	427
S. Mindanao	38.6	48.2	11.2	5.4	23.9	797
C. Mindanao	54.4	39.1	16.2	2.3	23.5	406
ARMM	34.9	65.7	13.9	1.2	17.6	322
Caraga	50.8	65.0	23.6	2.4	8.9	314
Total	48.7	48.7	13.7	4.8	14.4	12,401

**Table 10.3 Treatment of dog bites**

Among households with any member bitten by a dog in the last 3 months, percentage reporting various treatments, Philippines 1998

Treatment of dog bite	Percentage
Washed with soap and water	37.3
Applied garlic on site	37.0
Consulted health center/physician	25.6
Sought an herbulario	28.8
Immediately killed the dog	0.8
Observed the dog	8.9
Other	26.2
Nothing	2.0
Number of households	471

## Leprosy

By the year 2000, the Leprosy Control Program of the Department of Health aims to eliminate leprosy as a public health problem by bringing down the prevalence rate to less than 1 case per 1,000 population. Information campaigns designed to increase public knowledge about leprosy are a major activity of the Department of Health.

Respondents were asked how leprosy is acquired, whether it is curable, and whether patients with leprosy can be treated at home. Table 10.4 details the responses regarding the mode of transmission. Skin-to-skin transmission and droplet or airborne transmission were correctly known to only 21 percent and 11 percent of respondents, respectively. While misconceptions regarding the transmission of leprosy still abound, 27 percent do not know a mode of transmission and 24 percent do not know the disease at all.

Only 60 percent of household respondents know that leprosy is curable (Table 10.5). The proportion who know that leprosy is curable ranges from a low of 49 percent in Central Luzon to a high of 75 percent in Western Mindanao. Only 11 percent know that treatment can be done at home. It is worth noting that 40 percent believe that leprosy is not curable.

Table 10.4 Perceived transmission of leprosy

Percentage of household respondents who cite various modes of transmission of leprosy, by region, Philippines 1998

Region	Mode of transmission of leprosy							Number of household respondents
	Skin- to- skin	Droplets/ airborne	Here- ditary	Exposure to hot and cold	Eating certain foods	Other	Don't know mode of transmission	
Metro Manila	15.6	8.3	19.8	24.2	2.9	10.0	31.3	15.3 1,859
Cordillera Admin.	31.2	5.7	2.7	0.5	3.6	14.7	25.0	27.9 212
Ilocos	35.6	9.1	9.3	2.1	3.0	8.7	20.1	27.4 667
Cagayan Valley	29.7	11.7	4.9	1.6	3.3	22.8	24.2	19.3 475
C. Luzon	7.3	2.1	15.6	7.3	3.0	6.0	43.0	22.8 1,292
S. Tagalog	11.1	6.2	14.0	9.8	3.6	5.8	26.6	33.3 1,818
Bicol	8.6	5.8	11.0	3.7	1.2	4.5	31.8	40.3 740
W. Visayas	19.4	10.4	5.8	1.3	5.7	27.8	31.1	16.7 1,027
C. Visayas	24.1	11.9	10.6	1.3	4.6	26.0	19.5	26.6 959
E. Visayas	28.1	14.6	7.1	0.6	2.0	27.3	20.8	19.4 620
W. Mindanao	41.5	21.3	22.5	3.7	10.6	14.0	9.7	24.2 466
N. Mindanao	28.2	9.5	7.0	0.9	5.2	9.9	23.7	28.1 427
S. Mindano	26.4	15.6	9.5	1.8	10.2	23.4	27.3	15.3 797
C. Mindanao	25.3	23.3	7.6	1.5	6.6	16.5	19.5	29.5 406
ARMM	48.0	32.3	17.0	5.2	6.3	14.1	10.2	30.0 322
Caraga	35.3	19.0	12.9	1.3	7.9	12.3	21.0	22.4 314
Total	20.9	10.5	12.4	7.0	4.4	14.1	26.9	24.2 12,401

**Table 10.5 Curability of leprosy**

Among household respondents who know of leprosy, percent distribution by whether or not they think it is curable and whether or not it can be treated at home, according to region, Philippines 1998

Region	Think leprosy is curable			Number of household respondents	
	Can be treated at home	Cannot be treated at home	Think leprosy is not curable		
Metro Manila	10.6	54.0	35.1	100.0	1,569
Cordillera Admin.	18.7	37.5	43.8	100.0	152
Ilocos	10.7	59.0	30.3	100.0	483
Cagayan Valley	9.4	44.4	46.2	100.0	381
C. Luzon	5.8	43.0	51.2	100.0	998
S. Tagalog	13.4	41.2	45.4	100.0	1,210
Bicol	13.8	45.3	40.9	100.0	440
W. Visayas	8.9	47.6	43.6	100.0	854
C. Visayas	11.7	54.5	33.8	100.0	702
E. Visayas	17.4	44.3	38.3	100.0	500
W. Mindanao	14.4	61.2	24.5	100.0	351
N. Mindanao	11.7	38.4	49.9	100.0	307
S. Mindanao	11.0	48.6	40.2	100.0	673
C. Mindanao	10.7	57.2	31.8	100.0	286
ARMM	4.6	66.2	29.2	100.0	225
Caraga	7.8	51.0	41.0	100.0	244
Total	11.0	49.0	40.0	100.0	9,375

## Tuberculosis

Household respondents were asked about their perceptions of the cause(s) of tuberculosis (TB). Only 16 percent correctly identified microbes or bacteria as the cause of tuberculosis. A great majority of the respondents still have incorrect perceptions regarding the cause of tuberculosis as shown in Table 10.6. There is not much difference in the level of knowledge among regions. ARMM and Caraga respondents have the highest percentage with correct perceptions (28 and 27 percent, respectively), while those from Western Visayas have the lowest (11 percent).

For households with any member taking anti-TB medicines at the time of the survey, the respondents were asked for the source of the anti-TB drugs taken. Figure 10.1 shows that the health centers and drugstores each provide anti-TB medicines to over 40 percent of TB patients and government hospitals provide to 11 percent of TB cases. Table 10.7 shows that respondents have different perceptions regarding the length of treatment for TB. It is worth noting that a sizeable proportion still believe that TB can be treated in as short a duration as 1-3 months, while 16 percent don't know the length of treatment. According to DOH policy, TB should be treated for at least 6 months.

**Table 10.6 Causes of tuberculosis**

Percentage of household respondents who report various causes of tuberculosis, by region, Philippines 1998

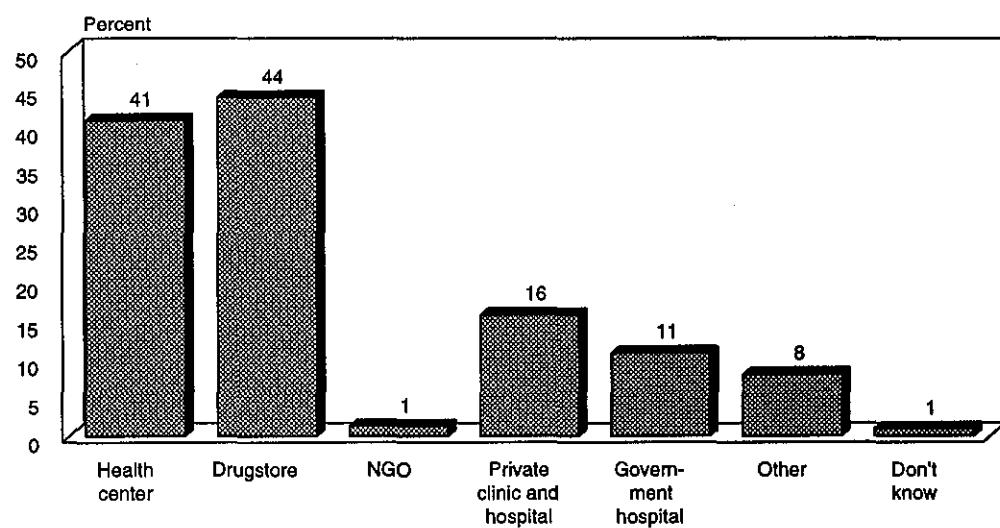
Region	Microbes/ germs/ bacteria	Perceived causes of TB						Don't know cause	Don't know TB	Number of household respondents
		Inherited	Life style	Smoking	Alcohol drinking	Fatigue	Other			
Metro Manila	16.5	18.9	3.6	57.9	38.8	35.0	29.3	3.7	1.7	1,859
Cordillera Admin.	12.1	6.0	0.5	47.8	20.0	10.2	38.3	12.3	3.2	212
Ilocos	16.7	13.7	0.9	63.0	31.4	32.0	13.5	6.2	2.7	667
Cagayan Valley	14.1	10.9	1.9	54.1	36.5	23.2	25.7	8.1	4.6	475
C. Luzon	16.5	11.1	1.4	50.1	31.8	27.2	22.6	11.1	2.1	1,292
S. Tagalog	16.0	13.0	18.2	53.2	29.3	24.0	12.3	6.7	3.7	1,818
Bicol	14.9	8.7	10.2	45.8	23.5	20.1	33.8	7.3	3.6	740
W. Visayas	10.6	10.4	7.7	39.6	38.7	30.6	45.5	5.5	1.0	1,027
C. Visayas	16.8	11.2	15.3	43.8	33.6	27.4	28.8	8.6	3.1	959
E. Visayas	12.0	5.0	0.5	56.8	41.0	19.6	34.3	4.3	1.6	620
W. Mindanao	21.6	20.1	5.8	66.2	47.8	34.0	16.0	3.1	3.2	466
N. Mindanao	16.9	8.2	2.4	58.3	43.1	25.6	14.5	8.7	2.9	427
S. Mindanao	14.9	6.5	5.7	64.4	52.7	40.2	26.3	5.2	1.3	797
C. Mindanao	16.2	10.5	5.1	67.2	54.3	30.9	23.0	2.6	2.3	406
ARMM	28.4	28.6	21.3	64.5	26.8	23.5	6.6	6.4	2.4	322
Caraga	27.4	11.0	8.0	67.6	60.4	46.7	17.9	3.0	1.8	314
Total	16.2	12.5	7.5	54.4	36.8	28.8	24.8	6.4	2.5	12,401

**Table 10.7 Length of TB treatment**

Percent distribution of household respondents by perceived length of TB treatment, according to region, Philippines 1998

Region	Perceived length of TB treatment									Number of household respondents	
	One month	Two months	Three months	Four months	Six months	Eight months	One year or more	Don't know length	Don't know TB		
Metro Manila	3.6	2.3	6.8	1.3	51.7	1.5	17.4	13.7	1.7	100.0	1,859
Cordillera Admin.	4.4	2.4	4.4	1.1	24.6	1.3	31.2	27.5	3.2	100.0	212
Ilocos	1.4	2.0	5.8	2.9	45.5	0.9	24.4	14.5	2.7	100.0	667
Cagayan Valley	3.2	3.2	5.1	1.0	40.1	3.3	25.4	14.1	4.6	100.0	475
C. Luzon	2.2	1.4	4.6	1.1	51.4	1.7	20.9	14.6	2.1	100.0	1,292
S. Tagalog	5.5	2.0	8.4	2.0	49.1	2.3	17.1	9.9	3.7	100.0	1,818
Bicol	6.9	2.6	9.9	2.5	40.3	1.7	19.2	13.3	3.6	100.0	740
W. Visayas	6.9	5.1	9.8	1.9	26.8	1.5	31.0	16.0	1.0	100.0	1,027
C. Visayas	5.4	4.1	10.0	2.0	25.3	1.5	22.8	25.8	3.1	100.0	959
E. Visayas	4.0	3.7	2.6	1.2	34.4	1.1	32.2	19.3	1.6	100.0	620
W. Mindanao	3.6	3.3	8.5	7.6	31.3	4.8	24.7	13.0	3.2	100.0	466
N. Mindanao	3.7	2.3	4.0	1.4	29.5	1.8	32.7	21.8	2.9	100.0	427
S. Mindanao	6.6	2.9	7.1	1.9	28.9	1.7	28.1	21.4	1.3	100.0	797
C. Mindanao	2.9	2.5	4.6	1.4	41.7	2.6	21.9	19.9	2.3	100.0	406
ARMM	2.0	0.6	1.5	2.4	37.0	4.9	31.3	17.7	2.4	100.0	322
Caraga	4.6	3.1	6.4	1.8	31.4	1.9	36.1	12.9	1.8	100.0	314
Total	4.4	2.7	6.9	1.9	40.2	2.0	23.5	16.0	2.5	100.0	12,401

**Figure 10.1**  
**Sources of Anti-TB Medicines**



Note: Based on households with a member taking anti-TB medication.

1998 NDHS

## 10.2 Non-Communicable Diseases

### Healthy Lifestyle

Household respondents were asked what they do to keep themselves healthy. Results in Table 10.8 show that the majority (74 percent) of respondents said that maintaining proper nutrition contributes to their health; one in three (29 percent) reported exercising for good health; and small proportions reported low-fat diets (5 percent) and low-salt diets (2 percent) as contributing to their health. Three to 5 percent of respondents mentioned avoiding smoking, moderate drinking, and monitoring blood pressure as ways they stay healthy. Respondents' behavior varies little by region, however, those in Caraga, Central Luzon, and Southern Tagalog are more convinced of the health benefits of proper nutrition while those in CAR are less convinced.

Table 10.8 Ways to stay healthy

Percentage of household respondents citing various ways to stay healthy, by region, Philippines 1998

Region	Ways to stay healthy								Number of household respondents	
	Exer- cise	Low- fat diet	Low- salt diet	Avoid smoking	Moderate drinking	Monitor blood pressure	Proper nutrition	Other		
Metro Manila	30.0	10.6	4.1	5.2	3.4	4.9	77.5	27.1	5.7	1,859
Cordillera Admin.	26.8	2.4	1.0	1.6	3.9	0.8	44.3	65.1	4.4	212
Ilocos	46.6	5.2	0.8	8.8	3.5	4.6	68.2	33.9	2.6	667
Cagayan Valley	30.3	4.1	0.9	3.5	1.9	1.7	63.2	48.1	6.2	475
C. Luzon	16.3	3.9	2.2	3.9	3.4	2.2	85.7	19.2	6.0	1,292
S. Tagalog	28.1	4.8	1.5	3.5	3.0	3.1	84.9	26.4	3.2	1,818
Bicol	38.2	2.4	0.4	1.1	0.9	3.7	55.6	26.3	13.1	740
W. Visayas	14.7	2.3	1.4	4.4	3.5	2.5	62.2	62.9	2.9	1,027
C. Visayas	28.9	5.3	3.1	3.4	2.8	2.8	73.9	42.9	2.7	959
E. Visayas	30.1	2.4	1.7	1.0	6.0	0.8	73.9	41.1	2.6	620
W. Mindanao	39.2	8.6	1.4	6.8	4.7	4.8	74.9	36.0	2.3	466
N. Mindanao	25.0	2.7	0.2	0.5	2.6	0.9	82.6	30.4	1.1	427
S. Mindanao	24.6	4.1	1.5	1.7	3.2	1.9	76.9	52.1	1.3	797
C. Mindanao	36.5	7.6	0.8	4.5	3.1	2.5	77.1	37.7	3.4	406
ARMM	46.6	6.6	2.1	27.1	2.9	2.6	46.0	28.9	12.2	322
Caraga	38.4	7.9	3.0	8.1	4.1	4.9	87.9	35.1	0.7	314
Total	29.0	5.3	1.9	4.5	3.2	3.0	74.3	35.5	4.4	12,401

### Smoking

Household respondents were asked the number of smokers in the household. The results show that 40 percent of households nationwide have no smokers (data not shown). It further shows that for every 6 individuals there is one smoker.

Respondents were asked about their perceptions on the effects of smoking. The results are found in Table 10.9. Only 34 percent of respondents believe that smoking causes lung cancer. While there were misconceptions regarding its effects, i.e., that it causes TB, one in 15 believes that smoking does not cause any ill effect to a person's health.

**Table 10.9 Effects of smoking on health**

Percentage of household respondents with various perceptions on the effects of smoking on the health of household members, by region, Philippines 1998

Region	Perceived effects of smoking on health							Number of household respondents	
	Causes TB	Causes lung cancer	Causes lung disease	Causes heart disease	Causes asthma	Causes ulcer	Other		
Metro Manila	22.6	39.2	53.7	17.6	16.7	3.2	17.5	3.0	1,859
Cordillera Admin.	27.9	35.4	21.5	9.4	6.0	2.9	38.0	8.6	212
Ilocos	50.1	52.2	28.2	10.7	9.0	2.3	12.9	5.0	667
Cagayan Valley	26.4	35.7	29.7	8.0	9.1	2.8	23.6	14.5	475
C. Luzon	18.9	30.0	45.9	17.0	15.1	3.3	15.1	8.7	1,292
S. Tagalog	15.5	40.6	52.7	12.4	15.4	2.7	10.3	5.0	1,818
Bicol	30.9	29.1	45.6	7.4	8.9	3.0	14.1	10.3	740
W. Visayas	13.5	27.2	37.9	10.7	11.2	5.6	42.9	9.8	1,027
C. Visayas	17.6	29.8	57.3	9.4	10.8	2.7	26.6	6.2	959
E. Visayas	32.5	20.5	45.0	4.9	5.4	0.8	35.2	5.4	620
W. Mindanao	38.0	31.6	42.3	5.9	24.3	6.1	21.3	5.5	466
N. Mindanao	14.2	22.7	60.3	2.6	12.1	2.9	14.0	4.7	427
S. Mindanao	20.5	26.6	52.9	4.9	13.8	3.0	28.6	7.3	797
C. Mindanao	43.1	47.8	41.9	9.9	15.3	4.3	16.1	4.5	406
ARMM	61.9	23.4	29.8	14.7	29.2	10.6	12.1	10.6	322
Caraga	30.5	46.5	48.9	9.3	25.6	6.5	18.2	4.7	314
Total	24.8	34.1	46.6	11.1	14.0	3.5	20.6	6.6	12,401

## Cancer

Awareness of signs and symptoms of cancer was probed in this study. Shown in Table 10.10 are the results. One out of 4 respondents said that the presence of a lump or mass and the occurrence of sudden weight loss are possible warning signs of cancer. Persistent pain was considered by 1 in 7 respondents as a symptom of cancer. Other signs and symptoms such as wounds that do not heal, bleeding, irregular defecation, irregular urination, and hoarseness of voice were also reported by some respondents.

A recent campaign to prevent cancer in women emphasized early detection of breast cancer and cervical cancer through regular breast self-examination and submission for cervical examination. It is worth noting that almost 1 in 3 women respondents age 15-49 reported having examined their breasts for the presence of a mass within the month before the survey (data not shown).

Less popular among women is obtaining a pap smear to screen for cervical cancer. Only 13 percent of women throughout the country had a pap smear within the last 5 years (data not shown).

Table 10.10 Signs and symptoms of cancer

Percentage of household respondents who know about specific signs and symptoms of cancer, by region, Philippines 1998

Region	Signs and symptoms of cancer										Number of household respondents
	Lump/mass	Sore/wound that does not heal	Sudden weight loss	Bleeding	Irregular defecation	Irregular urination	Hoarseness of voice	Persistent pain	Other	None	
Metro Manila	35.1	8.1	36.5	8.3	5.5	2.6	5.9	16.6	18.0	2.0	1,859
Cordillera Admin.	19.7	3.4	11.6	2.7	0.8	1.0	1.6	4.8	31.0	7.8	212
Ilocos	31.4	3.8	25.7	4.4	2.9	2.1	3.7	11.9	12.3	1.1	667
Cagayan Valley	29.3	4.6	20.0	3.8	1.9	0.9	2.9	12.8	21.2	3.0	475
C. Luzon	26.0	7.0	27.6	6.3	2.5	1.5	1.9	9.8	14.2	1.1	1,292
S. Tagalog	35.0	8.3	34.5	5.9	1.8	0.9	3.3	14.6	16.3	1.0	1,818
Bicol	18.4	6.2	17.3	2.6	1.2	0.7	1.7	14.0	13.2	1.7	740
W. Visayas	20.3	3.1	20.9	4.9	1.2	1.3	2.0	19.0	29.1	0.7	1,027
C. Visayas	13.1	2.0	22.6	1.5	3.1	1.9	1.9	10.0	24.2	3.4	959
E. Visayas	15.4	5.4	12.5	2.2	1.3	0.2	1.8	12.5	31.4	3.6	620
W. Mindanao	15.7	4.7	31.2	6.3	2.1	1.8	5.3	25.8	17.0	4.4	466
N. Mindanao	8.2	2.7	17.9	4.1	1.4	1.4	1.5	11.5	9.0	3.8	427
S. Mindanao	12.3	6.9	22.2	2.4	1.2	0.7	2.4	11.2	38.4	5.4	797
C. Mindanao	23.0	4.6	21.3	3.1	0.9	1.1	0.6	13.0	23.2	1.4	406
ARMM	32.1	22.2	17.0	7.5	2.6	1.7	2.4	20.8	5.7	2.4	322
Caraga	22.2	6.2	32.4	2.8	1.9	1.2	5.8	20.0	21.0	3.1	314
Total	24.6	6.2	26.1	4.9	2.4	1.4	3.0	14.2	20.1	2.3	12,401

### 10.3 Environmental Health

#### Garbage Disposal

Respondents were asked how they dispose of their household garbage. Forty-eight percent of households burn their garbage. In 30 percent of households, garbage is collected by trucks or carts. Six percent of households either dump garbage into individual open dumping sites or throw waste into low land areas: 5 percent bury their garbage and only 4 percent conduct composting (data not shown).

Of the households that utilize garbage trucks, daily garbage collection is done in only 37 percent. In the remaining two-thirds of these households, garbage collection is done once or twice weekly or once biweekly (49 percent and 10 percent, respectively).

#### Use of Pre-cooked Foods

As shown in Table 10.11, 23 percent of households buy pre-cooked foods. Seventeen percent of households go to *carinderias* (small eating places) while 11 percent go to restaurants, and 10 percent use ambulant vendors. This implies that the Department of Health policy should ensure the examination of food handlers not only in restaurants and carinderias but for ambulant vendors as well. The practice of buying pre-cooked foods is mainly done in Western Visayas and Metro Manila and less in Ilocos and Southern Mindanao.

**Table 10.11 Use of pre-cooked foods**

Percentage of households that regularly buy cooked food from ambulant vendors, carinderias, or restaurants, by region, Philippines 1998

Region	Percentage buying food from:			Any of the three types	Number of households
	Ambulant vendor	Carinderia	Restaurant		
Metro Manila	8.4	24.7	21.0	33.4	1,859
Cordillera Admin.	2.1	3.4	3.2	6.3	212
Ilocos	2.0	2.9	1.4	3.7	667
Cagayan Valley	5.9	6.5	5.2	10.3	475
C. Luzon	5.4	9.8	3.9	13.0	1,292
S. Tagalog	10.8	16.8	13.0	27.0	1,818
Bicol	11.9	11.4	4.1	20.1	740
W. Visayas	27.3	38.7	33.0	53.4	1,027
C. Visayas	6.0	19.1	6.9	22.4	959
E. Visayas	14.9	16.6	7.2	25.6	620
W. Mindanao	12.7	15.7	10.8	22.0	466
N. Mindanao	10.7	20.3	10.5	26.0	427
S. Mindanao	2.3	5.2	0.2	6.8	797
C. Mindanao	8.8	10.4	6.2	15.6	406
ARMM	8.6	4.4	2.3	12.2	322
Caraga	14.1	22.1	18.2	28.9	314
Total	9.8	16.5	11.2	23.4	12,401

Note: *Carinderia* refers to an eating place that is smaller than a restaurant.

## 10.4 Health Care Financing

Household respondents were asked if any household members were affiliated with any health care financing schemes or health insurance plans. Two in five households have health insurance plan. Two-thirds (68 percent) of the households in Metro Manila have health insurance. ARMM has the smallest proportion of households with a member in a health insurance scheme (13 percent). Details are in Table 10.12.

Among those with a health insurance plan, around 9 in 10 are members of Medicare (Table 10.13). One in 10 has membership in a private health insurance plan, and a negligible number have membership in a health maintenance organization (HMO) or a community cooperative.

Table 10.12. Health care financing membership

Percent distribution of households by whether or not any member has health care financing membership, by region, Philippines 1998

Region	Health care financing membership			Number of households
	Yes	No	Total	
Metro Manila	68.1	31.9	100.0	1,859
Cordillera Admin.	30.9	69.1	100.0	212
Ilocos	31.4	68.6	100.0	667
Cagayan Valley	24.5	75.5	100.0	475
C. Luzon	38.7	61.3	100.0	1,292
S. Tagalog	44.7	55.3	100.0	1,818
Bicol	22.3	77.7	100.0	740
W. Visayas	42.7	57.3	100.0	1,027
C. Visayas	38.2	61.8	100.0	959
E. Visayas	21.7	78.3	100.0	620
W. Mindanao	26.9	73.1	100.0	466
N. Mindanao	32.1	67.9	100.0	427
S. Mindanao	42.5	57.5	100.0	797
C. Mindanao	27.5	72.5	100.0	406
ARMM	13.1	86.9	100.0	322
Caraga	30.8	69.2	100.0	314
Total	39.7	60.3	100.0	12,401

Table 10.13 Type of insurance plan

Among households with health insurance plans, percentage reporting specific types of plans, by region, Philippines 1998

Region	Health insurance plan					Number of households
	Medicare	HMO	Private	Community cooperative	Other	
Metro Manila	90.4	1.5	17.8	0.3	0.6	1,266
Cordillera Admin.	84.8	0.0	20.9	0.5	5.8	65
Ilocos	98.5	0.0	5.3	0.5	0.0	209
Cagayan Valley	90.5	0.6	19.5	0.6	0.0	116
C. Luzon	92.1	0.3	5.2	5.5	1.5	500
S. Tagalog	94.8	1.2	11.9	0.8	0.0	813
Bicol	96.4	0.6	2.4	0.0	0.6	165
W. Visayas	96.6	0.0	5.6	1.1	1.7	438
C. Visayas	89.8	0.0	10.5	1.8	2.2	367
E. Visayas	97.2	1.1	4.4	0.0	0.0	134
W. Mindanao	76.3	0.9	30.6	0.0	4.1	126
N. Mindanao	91.0	0.0	3.3	1.0	3.3	137
S. Mindanao	99.1	1.1	1.7	0.3	0.3	339
C. Mindanao	98.3	0.0	3.4	0.0	0.6	112
ARMM	96.5	0.0	4.7	1.2	0.0	42
Caraga	97.1	1.9	1.4	0.5	1.9	97
Total	93.1	0.8	10.6	1.1	1.0	4,926

## 10.5 Traditional Medicine

Ten medicinal plants are endorsed by the Department of Health through the Traditional Medicine Program and are scientifically proven effective to cure certain illnesses and relieve some specific symptoms of illnesses. They consist of ampalaya, ulasimang bato, lagundi, niyogniyogan, sambong, tsaang gubat, yerba buena, bayabas, bawang, and acapulco.

Household respondents were asked whether they were familiar with these different medicinal herbs and their perceptions as to their intended use. Results in Table 10.14 indicate that bayabas and bawang are the most widely known medicinal herbs. Virtually all respondents are aware that bayabas has a medicinal use. Around 9 in 10 are familiar with bawang and 8 in 10 know about ampalaya's medicinal value. Three-fourths know that sambong is used medicinally. Least known among the 10 herbal medicines is niyogniyogan.

**Table 10.14. Familiarity with traditional medicines**

Percentage of household respondents who are familiar with various traditional herbal medicines and of those, the percentage who report specific uses for the medicines, Philippines 1998

Perceived use of traditional medicines in treating illness	Traditional medicine									
	Ampa- laya	Ulas- mang bato	Lagundi	Niyog- niyogan	Sam- bong	Tsaang gubat	Yerba buena	Bayabas	Bawang	Aca- pulco
<b>Percentage who know of medi- cinal value</b>	80.7	33.6	50.1	17.8	75.2	27.6	58.2	96.8	87.3	44.6
<b>Used traditional medicine to treat:</b>										
Head/body pains	1.0	1.3	4.6	2.1	8.9	1.2	<b>12.9</b>	0.9	1.4	0.4
Fever	3.1	3.8	19.1	3.4	13.2	5.8	16.4	1.5	1.5	0.5
Abdominal pain	10.7	7.4	10.8	9.3	21.1	<b>56.8</b>	22.3	47.7	8.1	1.1
Cough/asthma	43.1	8.8	<b>32.6</b>	5.6	36.7	7.7	30.7	2.8	2.6	0.6
Ascaris	2.8	0.6	0.5	<b>23.8</b>	0.5	1.0	0.7	1.0	0.5	2.3
Diabetes	5.4	3.5	0.5	1.0	0.6	0.6	0.1	0.3	0.1	0.1
Gouty arthritis	0.6	<b>16.1</b>	4.9	1.7	9.0	0.8	3.1	0.3	1.3	0.1
Hypercholeste- rolemia	2.5	5.2	0.5	1.0	0.6	0.8	0.4	0.3	<b>24.5</b>	0.2
Skin infection/ clean wound	8.4	8.6	5.1	5.2	5.0	3.8	4.8	<b>80.5</b>	12.2	<b>55.0</b>
Diuretic/for urinary stone	0.9	27.2	2.2	6.7	<b>6.2</b>	6.3	0.8	1.1	0.3	0.5
Other	39.5	22.3	25.2	18.6	37.1	14.8	24.7	11.5	64.9	37.2

Note: Numbers in bold indicate accepted uses of the particular herb.

While familiarity with some traditional medicines is high, the perception on the correct use of specific herbal medicines is generally low except for bayabas. In Table 10.14, the correct use of the different herbal medicines is highlighted in bold. Around 81 percent of those who said they were familiar with bayabas correctly identified it as used to clean wounds. On the other hand, only 5 percent of those who said that they were familiar with ampalaya correctly identified it as used to treat diabetes mellitus and only 6 percent of those who claimed familiarity with sambong knew that it is used as a diuretic and facilitates the excretion of urinary stones.

Respondents were asked what traditional medicines were used during the 3 months prior to the interview. Bayabas was the most often used (34 percent) followed by sambong (23 percent), bawang (23 percent) and ampalaya (19 percent). Least used is niyogniyogan (2 percent), ulasimang bato (6 percent), tsaang gubat (6 percent), acapulco (9 percent), and lagundi and yerba buena (9 and 13 percent, respectively) (data not shown).

Questions regarding awareness of the Department of Health's endorsement of the 10 traditional medicines was included in the questionnaire. The result reveals that more household respondents were aware of the DOH endorsement of bayabas than any other herbal medicine.

## **10.6 Health Facility Utilization**

Health facilities that are most widely used by the general population are either government or private health units. The government health facilities are either those retained by the Department of Health such as the regional hospitals or those health facilities that were devolved to the local governments such as the provincial, district, and municipal hospitals as well as the outpatient care centers, such as the rural health units (9 percent), barangay health stations (17 percent) and private clinics (13 percent).

In the 6 months prior to the survey, around 50 percent of households utilized a health facility for health care services (Table 10.15). Among hospitals, private hospitals are most utilized, followed by the provincial hospitals (9 and 4 percent, respectively). The regional hospitals are used by only 2 percent of households.

Households in Metro Manila are more likely to go to private clinics and private hospitals for health care services compared with households in other regions. Households in Ilocos and Cordillera Administrative Region are more likely to patronize the provincial hospitals than the rest of the regions. In Eastern Visayas, households visit district hospitals more often than households in than other regions.

Table 10.16 shows that among the household members who went to regional hospitals, the services mostly utilized were: treatment of illnesses, routine checkups, laboratory services, and antenatal, delivery, and postpartum care. Those who went to provincial and district hospitals visited these facilities for treatment of illnesses and injuries as well as for routine checkups and laboratory services. The barangay health stations and rural health units are generally utilized by households for most health care services but are least likely to be used for laboratory services and health and nutrition education.

**Table 10.15 Utilization of health facilities**

Percentage of households that utilized specific health facilities in the six months preceding the survey, by region, Philippines 1998

Region	Health facility									Any health facility
	Regional hospital	Provincial hospital	District hospital	Municipal hospital	Rural health unit	Barangay health station	Private hospital	Private clinic	Other	
Metro Manila	0.6	1.5	1.2	1.3	13.7	5.9	17.0	19.6	6.1	55.5
Cordillera Admin.	1.9	10.3	4.8	2.3	13.2	8.9	9.4	7.9	1.0	51.7
Ilocos	2.3	10.0	6.8	0.8	8.8	20.1	7.0	12.2	0.0	51.4
Cagayan Valley	2.3	4.9	3.3	1.7	7.8	12.6	7.1	9.1	0.7	45.1
C. Luzon	0.4	4.4	3.5	0.4	2.5	12.4	8.0	13.1	2.0	41.3
S. Tagalog	0.7	2.4	1.0	2.8	8.4	20.6	9.3	13.0	0.7	51.9
Bicol	2.6	4.2	1.5	2.2	8.3	24.3	4.2	7.8	1.3	49.1
W. Visayas	2.4	5.4	9.1	4.1	10.1	21.6	7.2	14.5	2.5	57.0
C. Visayas	1.8	4.8	2.1	0.4	7.4	22.4	9.4	14.5	0.7	50.5
E. Visayas	2.2	5.4	11.5	3.0	14.6	15.6	3.4	9.7	3.2	53.7
W. Mindanao	2.6	2.7	0.7	2.2	8.4	18.2	7.9	5.0	1.1	42.8
N. Mindanao	0.6	5.8	1.4	4.7	6.7	24.0	9.0	6.4	1.5	52.5
S. Mindanao	3.3	2.9	2.1	1.5	4.5	21.8	10.2	12.4	0.2	44.6
C. Mindanao	1.4	3.1	1.2	4.8	6.3	13.4	10.8	12.4	0.5	41.9
ARMM	3.1	4.7	2.0	1.2	8.1	13.9	3.8	7.3	0.8	37.8
Caraga	0.9	6.1	4.6	2.2	11.3	21.6	6.8	7.0	0.7	50.1
Total	1.5	4.2	3.3	2.0	8.7	16.9	9.2	12.6	1.9	49.7

**Table 10.16 Utilization of health facilities by type of service accessed**

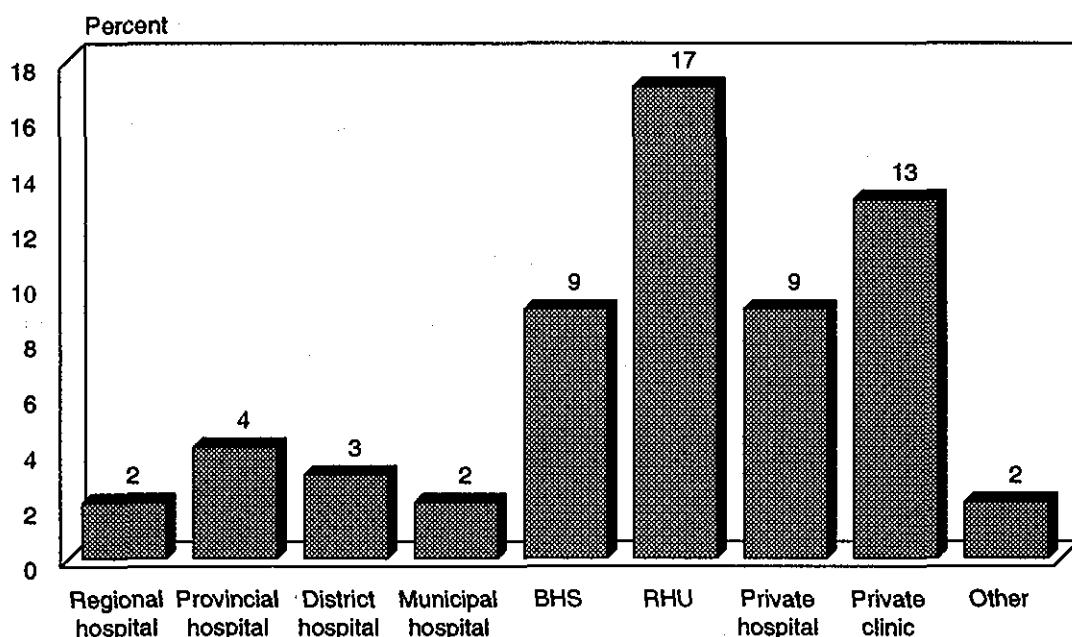
Percentage of households that utilized specific health facilities, by type of service accessed, Philippines 1998

Type of service	Health facility									
	Regional hospital	Provincial hospital	District hospital	Municipal hospital	Rural health unit	Barangay health station	Private hospital	Private clinic	Other	Any health facility
Treatment when ill or injured	59.0	56.1	64.7	64.7	43.1	33.0	57.4	55.0	53.6	48.5
Routine checkup	33.6	38.5	30.3	44.2	44.6	38.0	56.1	56.7	53.5	45.8
Laboratory service	26.3	24.2	17.4	15.0	4.9	0.0	32.4	16.3	24.5	13.6
Immunization	4.2	3.2	2.8	5.8	22.1	30.9	5.3	5.2	5.7	14.6
Family planning	4.8	2.6	1.9	5.2	14.2	16.1	2.6	3.1	4.2	8.3
Health and nutrition education	2.8	2.9	1.2	2.4	7.1	4.6	3.8	2.8	6.4	4.1
Prenatal delivery, postnatal	11.7	15.1	8.4	6.4	10.2	12.6	10.4	6.0	6.2	10.0
Other	10.2	7.4	9.8	8.1	8.7	5.4	4.3	6.2	17.7	6.9

RHU = Rural health unit

BHS = Barangay health station

**Figure 10.2**  
**Percentage of Households that Utilized Health Facilities**  
**in the 6 Months Preceding the Survey**



BHS = Barangay health station

RHU = Rural health unit

1998 NDHS

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# **APPENDIX A**

## **SAMPLE DESIGN**



## APPENDIX A

### SAMPLE DESIGN

Based on the objective of providing reliable results at the regional level, a subsample size of 755 EAs were selected from the ISH master sample. To maximize the efficiency of the sample design, the sample was allocated to the regions using a method called "power allocation procedure". This method takes into account the size of the domain and the precision of important characteristics based on the 1993 National Demographic Survey (NDS).

In order to ensure that the sample in each region is self-weighting, the actual number of households,  $n_{hijk}$ , in each EA was determined based on the overall sampling rate per region using the expression below:

$$n_{hijk} = \frac{N_{hijk}^* * f}{P_{1hijk}}$$

where:

$f$  = sampling fraction

$$= \frac{\text{Required Estimated Sample Size for the Region}}{\text{Weighted HH Estimate for the Region from NDHS Listing}}$$

$N_{hijk}^*$  = number of households from the NDHS listing for the  $k$ -th sample segment in the  $j$ -th sample EA in the  $i$ -th sample barangay in stratum  $h$

$P_{1hijk}$  = Probability of selection for the NDHS sample segment in the  $j$ -th sample EA in the  $i$ -th sample barangay in stratum  $h$

Hence, the probability of selection in all sampling stages considering the updating of the frame based from the 1995 POPCEN and the segmenting of large EAs in NCR can now be expressed as follows:

$$P_{hijk} = b_h \times \frac{N_{hi}}{N_h} \times \frac{N_{hij}}{N_{hi}} \times \frac{N_{hijk}}{N_{hij}} \times \frac{n_{hijk}}{N_{hijk}},$$

where:

- $b_h$  = number of sample EAs (or segments) selected in stratum  $h$  (urban and rural areas of large city/municipality domain, city, other urban or rural, within province) for the NDHS
- $N_h$  = total number of households from the 1995 POPCEN frame (cumulated measure size) for stratum  $h$
- $N_{hi}$  = number of households from the 1995 POPCEN frame in the  $i$ -th sample barangay in stratum  $h$
- $N_{hij}$  = number of households from the 1995 POPCEN frame for the  $j$ -th sample EA in the  $i$ -th sample barangay in stratum  $h$
- $N_{hijk}$  = number of households from the frame of segments (cumulated measure of size of the segments) for the  $j$ -th sample EA in the  $i$ -th sample barangay in stratum  $h$
- $N_{hijk}^*$  = number of households from the listing for the  $k$ -th sample segment in the  $j$ -th sample EA in the  $i$ -th sample barangay in stratum  $h$
- $n_{hijk}$  = number of households selected for the NDHS in the  $k$ -th sample segment in the  $j$ -th sample EA in the  $i$ -th sample barangay in the  $i$ -th sample PSU in stratum  $h$

Of the total NDHS sample areas, only 753 EAs were listed. Hence, the probabilities of selection ( $P_{1hijk}$ ) for the affected strata were adjusted before the selection of the sample households. Consequently, the number of households selected in the remaining EAs for these strata increased. The adjustment factor can be defined as follows:

$$\frac{b_h'}{b_h}$$

where  $b_h'$  is the total number of EAs actually listed.

The total number of sample households selected is about 13,708 households. For urban areas, the sample households were selected systematically. Cluster sampling on the other hand was applied in selecting sample households for rural areas to facilitate field operation. Two clusters of households for each rural barangay/EA/segment were selected.

### A.1 Sample Implementation

Percent Distribution of Households and eligible Women in the DHS sample by results of the interview, and household response rates, eligible women reponse rates, and overall reponse rates, according to region and urban-rural area, Philippines 1998

Result	Region									
	Metro Manila	Cordillera Admin.	Ilocos	Cagayan Valley	C-Luzon	S-Tagalog	Bicol	W-Visayas	C-Visayas	E-Visayas
<b>Selected household</b>										
Completed (C)	82.9	84.4	90.0	95.0	93.1	90.3	92.8	91.9	93.9	91.6
Household present but no competent respondent at home (HP)	1.6	2.9	0.3	0.1	0.2	0.7	0.2	0.3	0.8	0.2
Refused (R)	2.0	0.4	0.0	0.0	0.3	0.0	0.0	0.1	0.1	0.0
Dwelling not found (DNF)	0.0	1.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.1
Household absent	1.8	3.8	1.2	0.1	1.2	0.8	1.2	1.5	0.2	2.0
Dwelling vacant (DV)	10.5	6.9	8.2	4.3	4.7	7.9	5.5	5.4	5.0	5.1
Dwelling destroyed (DD)	0.9	0.4	0.0	0.3	0.2	0.3	0.1	0.3	0.0	1.0
Other	0.3	0.3	0.3	0.1	0.2	0.0	0.1	0.0	0.0	0.0
Total Percent Number	100.0 1169	100.0 735	100.0 730	100.0 726	100.0 911	100.0 1189	100.0 816	100.0 913	100.0 905	100.0 913
Household response rate (HRR) <sup>1</sup>	95.8	95.2	99.7	99.9	99.4	99.2	99.7	99.1	99.1	99.6
<b>Eligible women</b>										
Completed (EWC)	95.6	91.9	98.5	98.1	96.8	98.3	97.5	97.4	96.6	97.3
Not at home (EWNH)	2.4	4.2	0.1	1.0	1.4	0.7	1.0	1.2	1.9	1.3
Postponed (EWP)	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Refused (EWR)	0.8	1.7	0.1	0.1	0.2	0.1	0.1	0.2	0.5	0.0
Partly completed (EWPC)	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Incapacitated (EWI)	0.3	1.6	1.3	0.8	0.9	0.4	1.0	1.1	0.9	1.3
Other (EWO)	0.6	0.3	0.0	0.0	0.5	0.5	0.1	0.1	0.1	0.1
Total percent Number	100.0 1559	100.0 641	100.0 720	100.0 731	100.0 985	100.0 1202	100.0 764	100.0 906	100.0 1028	100.0 791
Eligible women reponse rate (EWRR) <sup>2</sup>	95.6	91.9	98.5	98.1	96.8	98.3	97.5	97.4	96.6	97.3
Overall response rate (ORR) <sup>3</sup>	91.6	87.5	98.2	97.9	96.2	97.4	97.3	96.4	95.7	97.0

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and woman response.

<sup>1</sup>Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

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

<sup>2</sup>Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC+EWNH+EWP+EWR+EWPC+EWI+EWO}$$

<sup>3</sup>The overall response rate (ORR) is calculated as:

$$ORR = HRR \times EWRR$$

A.I.-continued

Percent Distribution of Households and eligible Women in the DHS sample by results of the interview, and household response rates, eligible women response rates, and overall response rates, according to region and urban-rural area, Philippines 1998

Result	Region						Residence		
	W-Mindanao	N-Mindanao	S-Mindanao	C-Mindanao	ARMM	Caraga	Urban	Rural	Total
<b>Selected household</b>									
Completed (C)	92.1	89.5	89.3	91.5	89.8	92.5	89.2	91.5	90.5
Household present but no competent respondent at home (HP)	0.2	0.1	0.1	1.1	2.1	0.0	0.9	0.5	0.7
Refused (R)	0.0	0.0	0.0	0.3	0.0	0.0	0.5	0.0	0.2
Dwelling not found (DNF)	0.0	0.0	1.2	0.6	0.7	0.0	0.4	0.1	0.2
Household absent	1.7	2.9	1.5	1.7	1.6	1.4	1.6	1.4	1.5
Dwelling vacant (DV)	5.5	7.4	6.4	4.1	5.3	5.8	6.7	6.0	6.3
Dwelling destroyed (DD)	0.5	0.1	1.4	0.6	0.4	0.4	0.5	0.4	0.5
Other	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1
Total Percent Number	100.0 884	100.0 732	100.0 919	100.0 707	100.0 729	100.0 730	100.0 5822	100.0 7886	100.0 13708
<b>Household response rate (HRR)<sup>1</sup></b>									
HRR <sup>1</sup>	99.8	99.8	98.6	97.9	97.0	100.0	98.0	99.3	98.7
<b>Eligible women</b>									
Completed (EWC)	99.2	99.5	97.3	94.9	97.6	98.2	96.8	97.5	97.2
Not at home (EWNH)	0.0	0.1	2.0	3.9	1.8	1.0	1.9	1.1	1.5
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.0	0.0	0.2	0.3	0.2	0.0	0.4	0.2	0.3
Partly completed (EWPC)	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Incapacitated (EWI)	0.3	0.3	0.5	0.6	0.4	0.7	0.5	0.9	0.7
Other (EWO)	0.4	0.1	0.0	0.4	0.0	0.1	0.3	0.2	0.3
Total percent Number	100.0 981	100.0 785	100.0 1012	100.0 719	100.0 830	100.0 736	100.0 6954	100.0 7436	100.0 14390
<b>Eligible women response rate (EWRR)<sup>2</sup></b>									
EWRR <sup>2</sup>	99.2	99.5	97.3	94.9	97.6	98.2	96.8	97.5	97.2
<b>Overall response rate (ORR)<sup>3</sup></b>									
ORR <sup>3</sup>	98.9	99.3	95.9	92.8	94.7	98.2	94.8	96.8	95.9

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, and dwelling not found. The eligible woman response rate is calculated for completed interviews as a proportion of completed, not at home, postponed, refused, partially completed, incapacitated and "other." The overall response rate is the product of the household and woman response.

<sup>1</sup>Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

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

<sup>2</sup>Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{EWC}{EWC+EWNH+EWP+EWR+EWPC+EWI+EWO}$$

<sup>3</sup>The overall response rate (ORR) is calculated as:

$$ORR = HRR \times EWRR$$

## **APPENDIX B**

### **ESTIMATES OF SAMPLING ERRORS**



## APPENDIX B

### ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the NDHS 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 evaluated statistically. The sample of respondents selected in the NDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the NDHS sample is the result of a two-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the NDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate,  $r = y/x$ , where  $y$  represents the total sample value for variable  $y$ , and  $x$  represents the total number of cases in the group or subgroup under consideration. The variance of  $r$  is computed using the formula given below with the standard error being the square root of the variance:

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

in which

$$z_{hi} = y_{hi} - r \cdot x_{hi}, \text{ and } z_h = y_h - r \cdot x_h$$

where  $h$  represents the stratum which varies from 1 to  $H$ ,  
 $m_h$  is the total number of enumeration areas (EAs) selected in the  $h^{\text{th}}$  stratum,  
 $y_{hi}$  is the sum of the values of variable  $y$  in the  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  stratum,  
 $x_{hi}$  is the sum of the number of cases in the  $i^{\text{th}}$  EA in the  $h^{\text{th}}$  stratum, and  
 $f$  is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers

*all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the NDHS, there were 752 non-empty clusters. Hence, 751 replications were created. The variance of a rate  $r$  is calculated as follows:

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

in which

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

where  $r$  is the estimate computed from the full sample of 752 clusters,  
 $r_{(i)}$  is the estimate computed from the reduced sample of 751 clusters ( $i^{\text{th}}$  cluster excluded), and  
 $k$  is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the NDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 16 regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.1.1 to B.1.19 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $R \pm 2SE$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant since there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women age 15-49*) can be interpreted as follows: the overall average from the national sample is 2.156 and its standard error is .029. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $2.156 \pm 2 \times .029$ . There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 15 to 49 is between 2.098 and 2.214.

Sampling errors are analyzed for the national sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 0 percent and 33 percent with an average of 3.6 percent; the highest relative standard errors are for estimates of very low values (e.g., *currently using male sterilization* among currently married women). If estimates of very low values (less than 10 percent) were removed, than the average drops to 1.8 percent. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 2.3 percent. However, for the mortality rates, the average relative standard error is higher, 8.4 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *with secondary education or higher*, the relative standard errors as a percent of the estimated mean for the whole country, for the rural areas, and for Cagayan Valley Region are 0.9 percent, 1.8 percent, and 5.4 percent, respectively.

For the total sample, the value of the design effect (DEFT) averaged over all variables is 1.27, which means that due to multi-stage clustering of the sample variance is increased by a factor of 1.56 over that in an equivalent simple random sample.

Table B.1.1 Sampling errors: Entire sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
Urban	0.566	0.007	13983	13983	1.679	0.012	0.552	0.580
No education	0.017	0.002	13983	13983	1.483	0.094	0.014	0.021
With education	0.722	0.006	13983	13983	1.631	0.009	0.710	0.735
Never Married	0.364	0.006	13983	13983	1.550	0.017	0.351	0.376
Currently in union	0.596	0.007	13983	13983	1.586	0.011	0.583	0.609
Married before age of 20	0.324	0.007	11034	11059	1.527	0.021	0.311	0.338
Had first sexual intercourse before 18	0.171	0.005	11034	11059	1.341	0.028	0.162	0.181
Children ever born	2.156	0.029	13983	13983	1.369	0.013	2.098	2.214
Children ever born to women over 40	4.419	0.067	2693	2651	1.186	0.015	4.286	4.553
Children Surviving	2.001	0.026	13983	13983	1.364	0.013	1.949	2.054
Know any method	0.985	0.002	8634	8336	1.184	0.002	0.982	0.988
Know any modern method	0.979	0.002	8634	8336	1.181	0.002	0.976	0.983
Ever used any contraceptive method	0.694	0.006	8634	8336	1.266	0.009	0.681	0.706
Currently using any method	0.465	0.007	8634	8336	1.256	0.014	0.452	0.479
Currently using a modern method	0.282	0.006	8634	8336	1.216	0.021	0.270	0.294
Currently using pill	0.099	0.004	8634	8336	1.251	0.041	0.091	0.107
Currently using IUD	0.037	0.003	8634	8336	1.267	0.070	0.032	0.042
Currently using injection	0.024	0.002	8634	8336	1.354	0.094	0.019	0.028
Currently using condom	0.016	0.002	8634	8336	1.224	0.103	0.013	0.019
Currently using female sterilization	0.103	0.004	8634	8336	1.288	0.041	0.095	0.111
Currently using male sterilization	0.001	0.000	8634	8336	1.125	0.325	0.000	0.002
Currently using periodic abstinence	0.087	0.003	8634	8336	1.095	0.038	0.080	0.093
Currently using withdrawal	0.089	0.003	8634	8336	1.104	0.038	0.082	0.095
Public source user	0.720	0.012	2439	2403	1.334	0.017	0.695	0.744
Want no more children	0.619	0.006	8634	8336	1.187	0.010	0.606	0.631
Want to delay next birth at least 2 years	0.187	0.005	8634	8336	1.112	0.025	0.178	0.196
Ideal number of children	3.202	0.015	13693	13736	1.170	0.005	3.173	3.231
Mother received tetanus injections	0.685	0.008	8083	7566	1.231	0.012	0.669	0.700
Received medical care at birth	0.564	0.010	8083	7566	1.417	0.018	0.543	0.585
Had diarrhea in last 2 weeks	0.074	0.004	7751	7286	1.107	0.048	0.067	0.081
Received ORS treatment	0.434	0.023	604	539	1.022	0.053	0.388	0.479
Received medical treatment	0.439	0.023	604	539	1.047	0.052	0.393	0.485
Having health card	0.414	0.015	1554	1474	1.191	0.037	0.383	0.445
Received BCG vaccination	0.908	0.008	1554	1474	1.102	0.009	0.891	0.924
Received DPT vaccination (3 doses)	0.809	0.012	1554	1474	1.194	0.015	0.784	0.833
Received polio vaccination (3 doses)	0.817	0.012	1554	1474	1.196	0.015	0.793	0.842
Received measles vaccination	0.789	0.013	1554	1474	1.200	0.016	0.763	0.814
Fully immunized	0.728	0.014	1554	1474	1.222	0.020	0.700	0.757
Total fertility rate	3.730	0.084	NA	39113	1.434	0.023	3.561	3.898
Neonatal mortality rate	17.800	1.736	8279	7742	1.086	0.098	14.328	21.273
Infant mortality rate	35.134	2.302	8297	7756	1.049	0.066	30.530	39.739
Child mortality rate	13.778	1.511	8341	7791	1.094	0.110	10.756	16.801
Under 5 child mortality rate	48.428	2.844	8359	7805	1.090	0.059	42.741	54.115
Postneonatal mortality rate	17.334	1.492	8297	7756	0.986	0.086	14.349	20.319

N.A. = Not Applicable

Table B.1.2 Sampling errors: Urban sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
							R-2SE	R+2SE
Urban	1.000	0.000	6730	7911	NA	0.000	1.000	1.000
No education	0.006	0.001	6730	7911	1.080	0.167	0.004	0.008
With education	0.820	0.007	6730	7911	1.477	0.008	0.806	0.833
Never Married	0.419	0.010	6730	7911	1.594	0.023	0.400	0.438
Currently in union	0.534	0.010	6730	7911	1.643	0.019	0.514	0.554
Married before age of 20	0.258	0.010	5238	6210	1.626	0.038	0.239	0.278
Had first sexual intercourse before 18	0.133	0.007	5238	6210	1.437	0.051	0.119	0.146
Children ever born	1.741	0.038	6730	7911	1.447	0.022	1.664	1.817
Children ever born to women over 40	3.696	0.084	1255	1438	1.166	0.023	3.528	3.865
Children Surviving	1.637	0.035	6730	7911	1.438	0.021	1.567	1.708
Know any method	0.993	0.001	3680	4222	0.980	0.001	0.990	0.996
Know any modern method	0.990	0.002	3680	4222	1.074	0.002	0.987	0.994
Ever used any contraceptive method	0.741	0.008	3680	4222	1.118	0.011	0.725	0.757
Currently using any method	0.507	0.009	3680	4222	1.138	0.018	0.488	0.526
Currently using a modern method	0.313	0.008	3680	4222	1.030	0.025	0.297	0.329
Currently using pill	0.107	0.006	3680	4222	1.221	0.058	0.095	0.120
Currently using IUD	0.034	0.004	3680	4222	1.247	0.110	0.027	0.042
Currently using injection	0.023	0.003	3680	4222	1.320	0.142	0.016	0.030
Currently using condom	0.019	0.003	3680	4222	1.189	0.141	0.014	0.024
Currently using female sterilization	0.126	0.007	3680	4222	1.236	0.054	0.113	0.140
Currently using male sterilization	0.001	0.000	3680	4222	0.956	0.523	0.000	0.002
Currently using periodic abstinence	0.093	0.005	3680	4222	1.050	0.054	0.083	0.104
Currently using withdrawal	0.093	0.005	3680	4222	0.994	0.051	0.083	0.102
Public source user	0.622	0.017	1193	1363	1.246	0.028	0.587	0.657
Want no more children	0.600	0.010	3680	4222	1.198	0.016	0.581	0.620
Want to delay next birth at least 2 years	0.186	0.007	3680	4222	1.129	0.039	0.172	0.201
Ideal number of children	3.052	0.018	6628	7801	1.094	0.006	3.016	3.087
Mother received tetanus injections	0.685	0.012	3079	3465	1.152	0.017	0.662	0.709
Received medical care at birth	0.786	0.012	3079	3465	1.233	0.015	0.762	0.809
Had diarrhea in last 2 weeks	0.065	0.005	2979	3360	1.068	0.079	0.054	0.075
Received ORS treatment	0.447	0.039	201	218	1.044	0.087	0.369	0.525
Received medical treatment	0.478	0.037	201	218	1.017	0.078	0.404	0.553
Having health card	0.421	0.022	614	700	1.078	0.052	0.377	0.464
Received BCG vaccination	0.950	0.010	614	700	1.071	0.010	0.931	0.969
Received DPT vaccination (3 doses)	0.855	0.020	614	700	1.353	0.023	0.815	0.895
Received polio vaccination (3 doses)	0.855	0.019	614	700	1.277	0.022	0.817	0.892
Received measles vaccination	0.822	0.018	614	700	1.179	0.022	0.785	0.859
Fully immunized	0.761	0.022	614	700	1.277	0.030	0.716	0.806
Total fertility rate	3.012	0.096	NA	22194	1.250	0.032	2.819	3.204
Neonatal mortality rate	17.613	2.074	6171	6907	1.080	0.118	13.465	21.761
Infant mortality rate	30.890	2.607	6174	6910	1.064	0.084	25.677	36.103
Child mortality rate	15.369	1.852	6196	6933	1.031	0.121	11.665	19.073
Under 5 child mortality rate	45.784	3.304	6199	6936	1.086	0.072	39.177	52.391
Postneonatal mortality rate	13.277	1.562	6174	6910	1.007	0.118	10.153	16.402

N.A. = Not Applicable

Table B.1.3 Sampling errors: Rural sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
							R-2SE	R+2SE
Urban	0.000	0.000	7253	6072	NA	NA	0.000	0.000
No education	0.032	0.004	7253	6072	1.708	0.111	0.025	0.039
With education	0.596	0.011	7253	6072	1.833	0.018	0.575	0.617
Never Married	0.292	0.007	7253	6072	1.233	0.023	0.278	0.305
Currently in union	0.678	0.007	7253	6072	1.219	0.010	0.664	0.691
Married before age of 20	0.409	0.008	5796	4848	1.292	0.020	0.392	0.425
Had first sexual intercourse before 18	0.221	0.007	5796	4848	1.207	0.030	0.208	0.234
Children ever born	2.696	0.040	7253	6072	1.211	0.015	2.616	2.775
Children ever born to women over 40	5.277	0.098	1438	1212	1.209	0.019	5.081	5.473
Children Surviving	2.476	0.036	7253	6072	1.201	0.014	2.405	2.547
Know any method	0.977	0.003	4954	4114	1.316	0.003	0.972	0.983
Know any modern method	0.968	0.003	4954	4114	1.272	0.003	0.962	0.975
Ever used any contraceptive method	0.645	0.009	4954	4114	1.384	0.015	0.626	0.664
Currently using any method	0.422	0.010	4954	4114	1.360	0.023	0.403	0.442
Currently using a modern method	0.250	0.009	4954	4114	1.395	0.034	0.233	0.267
Currently using pill	0.091	0.005	4954	4114	1.221	0.055	0.081	0.101
Currently using IUD	0.040	0.004	4954	4114	1.268	0.089	0.033	0.047
Currently using injection	0.024	0.003	4954	4114	1.365	0.124	0.018	0.030
Currently using condom	0.013	0.002	4954	4114	1.189	0.146	0.009	0.017
Currently using female sterilization	0.079	0.005	4954	4114	1.272	0.062	0.069	0.089
Currently using male sterilization	0.002	0.001	4954	4114	1.255	0.411	0.000	0.003
Currently using periodic abstinence	0.080	0.004	4954	4114	1.122	0.054	0.071	0.088
Currently using withdrawal	0.084	0.005	4954	4114	1.214	0.057	0.075	0.094
Public source user	0.847	0.015	1246	1040	1.447	0.017	0.817	0.876
Want no more children	0.637	0.008	4954	4114	1.120	0.012	0.622	0.652
Want to delay next birth at least 2 years	0.188	0.006	4954	4114	1.054	0.031	0.176	0.200
Ideal number of children	3.399	0.023	7065	5935	1.239	0.007	3.352	3.446
Mother received tetanus injections	0.684	0.011	5004	4101	1.330	0.016	0.662	0.705
Received medical care at birth	0.377	0.014	5004	4101	1.595	0.037	0.349	0.405
Had diarrhea in last 2 weeks	0.082	0.005	4772	3926	1.168	0.060	0.072	0.092
Received ORS treatment	0.425	0.028	403	321	1.032	0.065	0.369	0.480
Received medical treatment	0.412	0.029	403	321	1.108	0.071	0.354	0.471
Having health card	0.408	0.021	940	775	1.323	0.053	0.365	0.451
Received BCG vaccination	0.869	0.013	940	775	1.159	0.015	0.843	0.895
Received DPT vaccination (3 doses)	0.767	0.015	940	775	1.101	0.020	0.736	0.797
Received polio vaccination (3 doses)	0.784	0.016	940	775	1.153	0.020	0.752	0.815
Received measles vaccination	0.759	0.017	940	775	1.241	0.023	0.724	0.794
Fully immunized	0.698	0.018	940	775	1.189	0.026	0.662	0.734
Total fertility rate	4.674	0.113	NA	16919	1.366	0.024	4.447	4.900
Neonatal mortality rate	20.622	1.526	10173	8292	0.997	0.074	17.571	23.674
Infant mortality rate	40.183	2.169	10186	8301	1.049	0.054	35.845	44.520
Child mortality rate	23.251	1.961	10233	8341	1.139	0.084	19.329	27.172
Under 5 child mortality rate	62.499	3.190	10246	8351	1.188	0.051	56.119	68.880
Postneonatal mortality rate	19.560	1.467	10186	8301	1.044	0.075	16.626	22.494

N.A. = Not Applicable

Table B.1.4 Sampling errors: Metropolitan Manila sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
Urban	1.000	0.000	1490	2818	NA	0.000	1.000	1.000
No education	0.004	0.002	1490	2818	1.141	0.465	0.000	0.008
With education	0.864	0.013	1490	2818	1.412	0.015	0.839	0.889
Never Married	0.484	0.022	1490	2818	1.710	0.046	0.440	0.528
Currently in union	0.460	0.023	1490	2818	1.767	0.050	0.415	0.506
Married before age of 20	0.217	0.020	1170	2213	1.676	0.093	0.177	0.258
Had first sexual intercourse before 18	0.113	0.013	1170	2213	1.378	0.113	0.087	0.138
Children ever born	1.374	0.082	1490	2818	1.694	0.060	1.210	1.538
Children ever born to women over 40	2.955	0.166	242	458	1.093	0.056	2.623	3.286
Children Surviving	1.311	0.076	1490	2818	1.671	0.058	1.160	1.463
Know any method	0.997	0.002	686	1298	0.988	0.002	0.993	1.000
Know any modern method	0.996	0.003	686	1298	1.014	0.003	0.991	1.000
Ever used any contraceptive method	0.714	0.017	686	1298	0.962	0.023	0.681	0.747
Currently using any method	0.494	0.021	686	1298	1.123	0.043	0.451	0.537
Currently using a modern method	0.287	0.016	686	1298	0.912	0.055	0.256	0.319
Currently using pill	0.106	0.014	686	1298	1.175	0.130	0.079	0.134
Currently using IUD	0.017	0.005	686	1298	1.087	0.311	0.007	0.028
Currently using injection	0.006	0.003	686	1298	1.036	0.517	0.000	0.012
Currently using condom	0.031	0.007	686	1298	1.037	0.223	0.017	0.044
Currently using female sterilization	0.124	0.012	686	1298	0.925	0.094	0.101	0.147
Currently using male sterilization	0.000	0.000	686	1298	NA	NA	0.000	0.000
Currently using periodic abstinence	0.101	0.010	686	1298	0.876	0.100	0.080	0.121
Currently using withdrawal	0.096	0.009	686	1298	0.830	0.097	0.078	0.115
Public source user	0.463	0.036	205	388	1.027	0.077	0.392	0.535
Want no more children	0.545	0.020	686	1298	1.044	0.036	0.505	0.585
Want to delay next birth at least 2 years	0.184	0.014	686	1298	0.955	0.077	0.155	0.212
Ideal number of children	2.918	0.027	1467	2775	0.928	0.009	2.863	2.972
Mother received tetanus injections	0.641	0.025	554	1048	1.058	0.039	0.590	0.691
Received medical care at birth	0.915	0.015	554	1048	1.082	0.017	0.885	0.945
Had diarrhea in last 2 weeks	0.056	0.011	539	1020	1.109	0.196	0.034	0.077
Received ORS treatment	0.500	0.078	30	57	0.856	0.156	0.344	0.656
Received medical treatment	0.600	0.092	30	57	1.032	0.154	0.415	0.785
Having health card	0.370	0.044	119	225	0.983	0.118	0.283	0.457
Received BCG vaccination	0.950	0.023	119	225	1.137	0.024	0.904	0.995
Received DPT vaccination (3 doses)	0.849	0.048	119	225	1.379	0.056	0.754	0.944
Received polio vaccination (3 doses)	0.840	0.045	119	225	1.276	0.053	0.751	0.930
Received measles vaccination	0.815	0.039	119	225	1.101	0.048	0.737	0.893
Fully immunized	0.731	0.052	119	225	1.267	0.072	0.626	0.836
Total fertility rate	2.486	0.188	NA	7971	1.201	0.076	2.109	2.863
Neonatal mortality rate	15.066	4.212	1073	2030	1.083	0.280	6.642	23.490
Infant mortality rate	23.653	5.627	1073	2030	1.198	0.238	12.400	34.907
Child mortality rate	15.307	4.025	1077	2037	1.018	0.263	7.258	23.356
Under 5 child mortality rate	38.598	7.402	1077	2037	1.208	0.192	23.794	53.402
Postneonatal mortality rate	8.587	3.136	1073	2030	1.113	0.365	2.316	14.859

N.A. = Not Applicable

Table B.1.5 Sampling errors: Cordillera Administrative Region sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
Urban	0.343	0.026	589	207	1.345	0.077	0.290	0.396
No education	0.036	0.009	589	207	1.160	0.249	0.018	0.053
With education	0.683	0.024	589	207	1.227	0.035	0.635	0.730
Never Married	0.307	0.015	589	207	0.765	0.047	0.278	0.336
Currently in union	0.655	0.017	589	207	0.878	0.026	0.621	0.690
Married before age of 20	0.417	0.025	458	161	1.070	0.059	0.368	0.466
Had first sexual intercourse before 18	0.251	0.023	458	161	1.130	0.091	0.205	0.297
Children ever born	2.849	0.126	589	207	1.044	0.044	2.596	3.102
Children ever born to women over 40	5.712	0.314	104	37	0.989	0.055	5.083	6.340
Children Surviving	2.593	0.115	589	207	1.076	0.044	2.363	2.822
Know any method	0.992	0.006	386	136	1.304	0.006	0.981	1.000
Know any modern method	0.990	0.006	386	136	1.227	0.006	0.977	1.000
Ever used any contraceptive method	0.632	0.045	386	136	1.832	0.071	0.542	0.722
Currently using any method	0.420	0.045	386	136	1.803	0.108	0.329	0.510
Currently using a modern method	0.306	0.033	386	136	1.418	0.109	0.239	0.372
Currently using pill	0.070	0.015	386	136	1.169	0.217	0.040	0.100
Currently using IUD	0.023	0.006	386	136	0.785	0.259	0.011	0.035
Currently using injection	0.039	0.012	386	136	1.189	0.301	0.015	0.062
Currently using condom	0.023	0.007	386	136	0.914	0.302	0.009	0.037
Currently using female sterilization	0.148	0.030	386	136	1.658	0.203	0.088	0.208
Currently using male sterilization	0.003	0.003	386	136	1.007	1.007	0.000	0.008
Currently using periodic abstinence	0.044	0.013	386	136	1.265	0.300	0.018	0.070
Currently using withdrawal	0.067	0.013	386	136	1.022	0.194	0.041	0.093
Public source user	0.818	0.037	121	42	1.044	0.045	0.745	0.892
Want no more children	0.614	0.026	386	136	1.050	0.042	0.562	0.666
Want to delay next birth at least 2 years	0.210	0.021	386	136	1.001	0.099	0.168	0.251
Ideal number of children	3.959	0.122	581	204	1.309	0.031	3.714	4.203
Mother received tetanus injections	0.663	0.031	424	149	1.155	0.046	0.601	0.724
Received medical care at birth	0.481	0.030	424	149	0.995	0.062	0.422	0.541
Had diarrhea in last 2 weeks	0.120	0.023	407	143	1.350	0.187	0.075	0.165
Received ORS treatment	0.449	0.050	49	17	0.709	0.112	0.348	0.550
Received medical treatment	0.265	0.060	49	17	0.957	0.228	0.144	0.386
Having health card	0.361	0.067	83	29	1.275	0.186	0.227	0.496
Received BCG vaccination	0.904	0.027	83	29	0.843	0.030	0.849	0.958
Received DPT vaccination (3 doses)	0.807	0.058	83	29	1.346	0.072	0.691	0.924
Received polio vaccination (3 doses)	0.819	0.053	83	29	1.263	0.065	0.712	0.926
Received measles vaccination	0.807	0.049	83	29	1.139	0.061	0.709	0.906
Fully immunized	0.759	0.061	83	29	1.306	0.081	0.636	0.882
Total fertility rate	4.795	0.345	NA	575	1.140	0.072	4.106	5.484
Neonatal mortality rate	18.692	6.173	859	302	1.026	0.330	6.346	31.037
Infant mortality rate	42.682	8.308	859	302	1.077	0.195	26.066	59.299
Child mortality rate	10.148	3.471	863	303	1.021	0.342	3.207	17.090
Under 5 child mortality rate	52.398	10.319	863	303	1.215	0.197	31.759	73.036
Postneonatal mortality rate	23.991	6.498	859	302	1.228	0.271	10.996	36.986

N.A. = Not Applicable

Tables B.1.6 Sampling errors: Ilocos Region sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
							R-2SE	R+2SE
Urban	0.358	0.021	709	689	1.139	0.057	0.317	0.399
No education	0.003	0.002	709	689	1.003	0.709	0.000	0.007
With education	0.770	0.025	709	689	1.599	0.033	0.720	0.821
Never Married	0.362	0.022	709	689	1.224	0.061	0.318	0.407
Currently in union	0.601	0.024	709	689	1.293	0.040	0.553	0.648
Married before age of 20	0.321	0.017	558	542	0.851	0.052	0.287	0.354
Had first sexual intercourse before 18	0.129	0.014	558	542	0.991	0.109	0.101	0.157
Children ever born	2.216	0.127	709	689	1.305	0.057	1.961	2.470
Children ever born to women over 40	4.993	0.278	143	139	1.134	0.056	4.438	5.548
Children Surviving	2.056	0.116	709	689	1.311	0.057	1.824	2.289
Know any method	1.000	0.000	426	414	NA	0.000	1.000	1.000
Know any modern method	1.000	0.000	426	414	NA	0.000	1.000	1.000
Ever used any contraceptive method	0.615	0.026	426	414	1.100	0.042	0.563	0.667
Currently using any method	0.432	0.024	426	414	0.985	0.055	0.385	0.479
Currently using a modern method	0.286	0.026	426	414	1.179	0.090	0.235	0.338
Currently using pill	0.101	0.012	426	414	0.812	0.118	0.077	0.125
Currently using IUD	0.014	0.007	426	414	1.175	0.477	0.001	0.028
Currently using injection	0.026	0.008	426	414	1.079	0.321	0.009	0.042
Currently using condom	0.009	0.005	426	414	0.999	0.498	0.000	0.019
Currently using female sterilization	0.134	0.020	426	414	1.195	0.147	0.094	0.173
Currently using male sterilization	0.002	0.002	426	414	1.001	1.001	0.000	0.007
Currently using periodic abstinence	0.033	0.007	426	414	0.818	0.215	0.019	0.047
Currently using withdrawal	0.110	0.011	426	414	0.737	0.102	0.088	0.133
Public source user	0.824	0.043	125	121	1.245	0.052	0.739	0.909
Want no more children	0.575	0.021	426	414	0.886	0.037	0.533	0.618
Want to delay next birth at least 2 years	0.195	0.022	426	414	1.125	0.111	0.152	0.238
Ideal number of children	3.230	0.070	700	680	1.509	0.022	3.090	3.370
Mother received tetanus injections	0.684	0.039	354	344	1.273	0.057	0.605	0.762
Received medical care at birth	0.664	0.045	354	344	1.392	0.068	0.574	0.754
Had diarrhea in last 2 weeks	0.067	0.024	342	332	1.570	0.362	0.019	0.116
Received ORS treatment	0.391	0.107	23	22	0.871	0.274	0.177	0.606
Received medical treatment	0.478	0.128	23	22	1.053	0.268	0.222	0.735
Having health card	0.282	0.037	71	69	0.695	0.132	0.207	0.356
Received BCG vaccination	0.859	0.037	71	69	0.886	0.043	0.786	0.933
Received DPT vaccination (3 doses)	0.690	0.037	71	69	0.686	0.054	0.616	0.764
Received polio vaccination (3 doses)	0.718	0.043	71	69	0.814	0.060	0.633	0.804
Received measles vaccination	0.704	0.063	71	69	1.176	0.089	0.579	0.830
Fully immunized	0.606	0.050	71	69	0.879	0.083	0.505	0.706
Total fertility rate	3.432	0.285	NA	1921	1.169	0.083	2.862	4.002
Neonatal mortality rate	27.682	6.072	728	707	0.937	0.219	15.538	39.825
Infant mortality rate	41.538	7.690	728	707	0.959	0.185	26.159	56.918
Child mortality rate	10.176	4.973	732	711	1.050	0.489	0.229	20.122
Under 5 child mortality rate	51.291	9.698	732	711	0.985	0.189	31.895	70.687
Postneonatal mortality rate	13.856	4.597	728	707	1.071	0.332	4.662	23.051

N.A. = Not Applicable

Table B.1.7 Sampling errors: Cagayan Valley sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases			Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)	R-2SE			R-2SE	R+2SE
Urban	0.244	0.027	717	474	1.686	0.111	0.190	0.298	
No education	0.020	0.010	717	474	1.881	0.498	0.000	0.039	
With education	0.647	0.035	717	474	1.958	0.054	0.577	0.717	
Never Married	0.279	0.016	717	474	0.929	0.056	0.248	0.310	
Currently in union	0.679	0.020	717	474	1.120	0.029	0.640	0.718	
Married before age of 20	0.454	0.031	557	368	1.458	0.068	0.393	0.516	
Had first sexual intercourse before 18	0.223	0.026	557	368	1.458	0.116	0.171	0.274	
Children ever born	2.275	0.099	717	474	1.138	0.043	2.078	2.472	
Children ever born to women over 40	4.303	0.228	142	94	1.075	0.053	3.847	4.758	
Children Surviving	2.126	0.088	717	474	1.110	0.041	1.950	2.301	
Know any method	0.990	0.004	487	322	0.983	0.005	0.981	0.999	
Know any modern method	0.984	0.007	487	322	1.214	0.007	0.970	0.998	
Ever used any contraceptive method	0.674	0.030	487	322	1.394	0.044	0.614	0.733	
Currently using any method	0.483	0.028	487	322	1.219	0.057	0.427	0.538	
Currently using a modern method	0.388	0.031	487	322	1.418	0.081	0.325	0.451	
Currently using pill	0.164	0.017	487	322	1.017	0.104	0.130	0.198	
Currently using IUD	0.051	0.012	487	322	1.173	0.229	0.028	0.075	
Currently using injection	0.045	0.015	487	322	1.550	0.323	0.016	0.074	
Currently using condom	0.000	0.000	487	322	NA	NA	0.000	0.000	
Currently using female sterilization	0.123	0.015	487	322	1.020	0.123	0.093	0.154	
Currently using male sterilization	0.002	0.002	487	322	0.997	0.997	0.000	0.006	
Currently using periodic abstinence	0.031	0.008	487	322	1.071	0.273	0.014	0.048	
Currently using withdrawal	0.060	0.011	487	322	0.978	0.176	0.039	0.081	
Public source user	0.849	0.028	192	127	1.073	0.033	0.793	0.905	
Want no more children	0.606	0.024	487	322	1.104	0.040	0.557	0.655	
Want to delay next birth at least 2 years	0.230	0.019	487	322	1.017	0.084	0.191	0.269	
Ideal number of children	3.374	0.063	713	471	1.273	0.019	3.248	3.501	
Mother received tetanus injections	0.678	0.035	366	242	1.205	0.052	0.607	0.748	
Received medical care at birth	0.421	0.059	366	242	1.854	0.140	0.303	0.538	
Had diarrhea in last 2 weeks	0.091	0.019	351	232	1.216	0.209	0.053	0.129	
Received ORS treatment	0.375	0.119	32	21	1.327	0.318	0.136	0.614	
Received medical treatment	0.313	0.094	32	21	1.070	0.299	0.125	0.500	
Having health card	0.290	0.053	69	46	0.973	0.184	0.183	0.397	
Received BCG vaccination	0.870	0.064	69	46	1.568	0.073	0.742	0.997	
Received DPT vaccination (3 doses)	0.826	0.065	69	46	1.423	0.079	0.696	0.956	
Received polio vaccination (3 doses)	0.826	0.065	69	46	1.423	0.079	0.696	0.956	
Received measles vaccination	0.841	0.067	69	46	1.521	0.080	0.706	0.975	
Fully immunized	0.826	0.065	69	46	1.423	0.079	0.696	0.956	
Total fertility rate	3.557	0.276	NA	1307	1.225	0.077	3.005	4.108	
Neonatal mortality rate	15.434	5.510	781	516	1.167	0.357	4.414	26.454	
Infant mortality rate	37.106	6.965	783	518	1.028	0.188	23.176	51.037	
Child mortality rate	16.115	4.960	785	519	1.118	0.308	6.195	26.035	
Under 5 child mortality rate	52.623	8.816	787	520	1.142	0.168	34.992	70.255	
Postneonatal mortality rate	21.672	4.568	783	518	0.885	0.211	12.536	30.808	

N.A. = Not Applicable

Table B.1.8 Sampling errors: Central Luzon sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases			Design effect (DEFT)	Relative error (SE/R)	Confidence limits-	
			Un- weighted (N)	Weight- ed (WN)	R-2SE			R-2SE	R+2SE
Urban	0.572	0.018	953	1414	1.096	0.031	0.537	0.607	
No education	0.002	0.001	953	1414	0.984	0.696	0.000	0.005	
With education	0.752	0.024	953	1414	1.743	0.032	0.704	0.801	
Never Married	0.343	0.018	953	1414	1.150	0.052	0.308	0.379	
Currently in union	0.624	0.017	953	1414	1.087	0.027	0.590	0.658	
Married before age of 20	0.315	0.015	758	1125	0.904	0.048	0.285	0.346	
Had first sexual intercourse before 18	0.146	0.013	758	1125	0.984	0.086	0.121	0.172	
Children ever born	2.010	0.065	953	1414	0.921	0.033	1.880	2.141	
Children ever born to women over 40	4.148	0.181	182	270	0.999	0.044	3.786	4.511	
Children Surviving	1.903	0.058	953	1414	0.872	0.030	1.787	2.020	
Know any method	0.993	0.002	595	883	0.707	0.002	0.989	0.998	
Know any modern method	0.993	0.002	595	883	0.707	0.002	0.989	0.998	
Ever used any contraceptive method	0.756	0.021	595	883	1.198	0.028	0.714	0.799	
Currently using any method	0.548	0.026	595	883	1.286	0.048	0.495	0.600	
Currently using a modern method	0.351	0.023	595	883	1.193	0.066	0.305	0.398	
Currently using pill	0.121	0.018	595	883	1.335	0.148	0.085	0.157	
Currently using IUD	0.007	0.003	595	883	1.034	0.515	0.000	0.014	
Currently using injection	0.020	0.007	595	883	1.127	0.322	0.007	0.033	
Currently using condom	0.010	0.004	595	883	0.978	0.398	0.002	0.018	
Currently using female sterilization	0.193	0.019	595	883	1.190	0.100	0.155	0.232	
Currently using male sterilization	0.000	0.000	595	883	NA	NA	0.000	0.000	
Currently using periodic abstinence	0.064	0.009	595	883	0.939	0.148	0.045	0.083	
Currently using withdrawal	0.131	0.014	595	883	1.001	0.106	0.103	0.159	
Public source user	0.762	0.039	214	318	1.342	0.051	0.683	0.840	
Want no more children	0.634	0.017	595	883	0.852	0.027	0.600	0.667	
Want to delay next birth at least 2 years	0.198	0.014	595	883	0.861	0.071	0.170	0.226	
Ideal number of children	3.272	0.042	948	1407	1.053	0.013	3.189	3.355	
Mother received tetanus injections	0.685	0.025	479	711	1.081	0.037	0.634	0.736	
Received medical care at birth	0.843	0.026	479	711	1.216	0.031	0.791	0.896	
Had diarrhea in last 2 weeks	0.058	0.009	462	686	0.848	0.162	0.039	0.077	
Received ORS treatment	0.407	0.122	27	40	1.262	0.300	0.163	0.652	
Received medical treatment	0.370	0.081	27	40	0.907	0.219	0.208	0.533	
Having health card	0.351	0.052	94	139	1.049	0.148	0.247	0.455	
Received BCG vaccination	0.979	0.014	94	139	0.973	0.015	0.950	1.000	
Received DPT vaccination (3 doses)	0.819	0.048	94	139	1.212	0.059	0.723	0.916	
Received polio vaccination (3 doses)	0.862	0.040	94	139	1.125	0.047	0.781	0.942	
Received measles vaccination	0.840	0.045	94	139	1.177	0.053	0.751	0.930	
Fully immunized	0.755	0.051	94	139	1.156	0.068	0.652	0.858	
Total fertility rate	3.516	0.176	NA	3975	0.981	0.050	3.163	3.868	
Neonatal mortality rate	20.148	5.464	953	1414	1.106	0.271	9.220	31.077	
Infant mortality rate	28.678	6.393	953	1414	1.132	0.223	15.892	41.465	
Child mortality rate	11.053	3.576	958	1422	1.030	0.324	3.901	18.206	
Under 5 child mortality rate	39.415	7.932	958	1422	1.214	0.201	23.551	55.278	
Postneonatal mortality rate	8.530	2.843	953	1414	0.956	0.333	2.844	14.215	

N.A. = Not Applicable

Table B.1.9 Sampling errors: Southern Tagalog sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases				Confidence limits	
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)		
Urban	0.591	0.018	1181	1917	1.249	0.030	0.555	0.627
No education	0.005	0.002	1181	1917	1.034	0.421	0.001	0.009
With education	0.742	0.017	1181	1917	1.332	0.023	0.708	0.776
Never Married	0.321	0.017	1181	1917	1.225	0.052	0.288	0.354
Currently in union	0.636	0.017	1181	1917	1.225	0.027	0.602	0.670
Married before age of 20	0.314	0.024	959	1557	1.584	0.076	0.266	0.361
Had first sexual intercourse before 18	0.178	0.018	959	1557	1.484	0.103	0.142	0.215
Children ever born	2.231	0.085	1181	1917	1.232	0.038	2.061	2.401
Children ever born to women over 40	4.085	0.210	234	380	1.219	0.051	3.665	4.506
Children Surviving	2.085	0.077	1181	1917	1.220	0.037	1.930	2.239
Know any method	0.997	0.002	751	1219	1.007	0.002	0.994	1.000
Know any modern method	0.996	0.001	751	1219	0.595	0.001	0.993	0.999
Ever used any contraceptive method	0.719	0.019	751	1219	1.144	0.026	0.681	0.757
Currently using any method	0.450	0.016	751	1219	0.883	0.036	0.418	0.482
Currently using a modern method	0.266	0.017	751	1219	1.054	0.064	0.232	0.300
Currently using pill	0.079	0.010	751	1219	1.000	0.125	0.059	0.098
Currently using IUD	0.029	0.008	751	1219	1.292	0.272	0.013	0.045
Currently using injection	0.025	0.009	751	1219	1.520	0.345	0.008	0.043
Currently using condom	0.013	0.004	751	1219	1.006	0.316	0.005	0.022
Currently using female sterilization	0.119	0.014	751	1219	1.221	0.122	0.090	0.147
Currently using male sterilization	0.000	0.000	751	1219	NA	NA	0.000	0.000
Currently using periodic abstinence	0.056	0.008	751	1219	1.009	0.151	0.039	0.073
Currently using withdrawal	0.124	0.012	751	1219	0.983	0.095	0.100	0.147
Public source user	0.644	0.041	202	328	1.202	0.063	0.562	0.725
Want no more children	0.674	0.020	751	1219	1.196	0.030	0.633	0.715
Want to delay next birth at least 2 years	0.164	0.016	751	1219	1.148	0.095	0.133	0.195
Ideal number of children	3.140	0.037	1168	1896	1.162	0.012	3.067	3.214
Mother received tetanus injections	0.669	0.028	664	1078	1.277	0.042	0.613	0.724
Received medical care at birth	0.598	0.032	664	1078	1.310	0.054	0.533	0.663
Had diarrhea in last 2 weeks	0.070	0.011	643	1044	1.110	0.163	0.047	0.093
Received ORS treatment	0.422	0.074	45	73	0.964	0.176	0.274	0.571
Received medical treatment	0.378	0.084	45	73	1.106	0.222	0.210	0.546
Having health card	0.358	0.054	137	222	1.324	0.152	0.249	0.467
Received BCG vaccination	0.898	0.025	137	222	0.951	0.027	0.849	0.947
Received DPT vaccination (3 doses)	0.810	0.033	137	222	0.990	0.041	0.744	0.877
Received polio vaccination (3 doses)	0.825	0.035	137	222	1.080	0.043	0.755	0.895
Received measles vaccination	0.730	0.042	137	222	1.098	0.057	0.646	0.814
Fully immunized	0.708	0.042	137	222	1.073	0.059	0.624	0.792
Total fertility rate	3.689	0.259	NA	5399	1.403	0.070	3.170	4.208
Neonatal mortality rate	21.142	3.211	1359	2206	0.816	0.152	14.721	27.564
Infant mortality rate	35.349	3.941	1359	2206	0.815	0.111	27.468	43.230
Child mortality rate	18.536	4.214	1368	2221	0.957	0.227	10.108	26.964
Under 5 child mortality rate	53.229	5.529	1368	2221	0.847	0.104	42.172	64.287
Postneonatal mortality rate	14.206	2.545	1359	2206	0.802	0.179	9.117	19.296

N.A. = Not Applicable

Table B.1.10 Sampling errors: Bicol Region sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases			Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)	R-2SE			R-2SE	R+2SE
Urban	0.301	0.020	745	703	1.187	0.066	0.261	0.341	
No education	0.005	0.002	745	703	0.699	0.349	0.002	0.009	
With education	0.626	0.029	745	703	1.658	0.047	0.567	0.684	
Never Married	0.289	0.017	745	703	1.035	0.060	0.254	0.323	
Currently in union	0.683	0.016	745	703	0.930	0.023	0.651	0.715	
Married before age of 20	0.347	0.026	602	568	1.357	0.076	0.294	0.400	
Had first sexual intercourse before 18	0.181	0.024	602	568	1.543	0.134	0.133	0.230	
Children ever born	2.797	0.100	745	703	0.959	0.036	2.597	2.998	
Children ever born to women over 40	5.387	0.283	155	146	1.127	0.052	4.822	5.952	
Children Surviving	2.596	0.089	745	703	0.927	0.034	2.419	2.773	
Know any method	0.996	0.003	509	481	0.987	0.003	0.991	1.000	
Know any modern method	0.994	0.003	509	481	0.987	0.003	0.987	1.000	
Ever used any contraceptive method	0.631	0.021	509	481	0.958	0.033	0.590	0.672	
Currently using any method	0.363	0.020	509	481	0.922	0.054	0.324	0.403	
Currently using a modern method	0.193	0.016	509	481	0.913	0.083	0.161	0.224	
Currently using pill	0.081	0.014	509	481	1.138	0.171	0.053	0.108	
Currently using IUD	0.028	0.012	509	481	1.632	0.431	0.004	0.051	
Currently using injection	0.010	0.004	509	481	1.005	0.448	0.001	0.019	
Currently using condom	0.012	0.005	509	481	1.010	0.410	0.002	0.021	
Currently using female sterilization	0.055	0.013	509	481	1.252	0.230	0.030	0.080	
Currently using male sterilization	0.002	0.002	509	481	0.983	0.983	0.000	0.006	
Currently using periodic abstinence	0.063	0.013	509	481	1.233	0.211	0.036	0.089	
Currently using withdrawal	0.090	0.012	509	481	0.915	0.129	0.067	0.114	
Public source user	0.770	0.047	100	94	1.107	0.061	0.676	0.864	
Want no more children	0.646	0.021	509	481	1.012	0.033	0.603	0.689	
Want to delay next birth at least 2 years	0.177	0.014	509	481	0.846	0.081	0.148	0.205	
Ideal number of children	3.171	0.048	726	686	1.004	0.015	3.076	3.266	
Mother received tetanus injections	0.681	0.021	561	530	0.901	0.031	0.639	0.723	
Received medical care at birth	0.442	0.046	561	530	1.734	0.104	0.350	0.534	
Had diarrhea in last 2 weeks	0.077	0.014	535	505	1.189	0.188	0.048	0.105	
Received ORS treatment	0.439	0.069	41	39	0.862	0.156	0.302	0.576	
Received medical treatment	0.463	0.063	41	39	0.790	0.136	0.337	0.590	
Having health card	0.484	0.052	95	90	1.017	0.108	0.380	0.589	
Received BCG vaccination	0.874	0.040	95	90	1.160	0.045	0.795	0.953	
Received DPT vaccination (3 doses)	0.747	0.032	95	90	0.713	0.043	0.684	0.811	
Received polio vaccination (3 doses)	0.747	0.029	95	90	0.653	0.039	0.689	0.806	
Received measles vaccination	0.747	0.049	95	90	1.098	0.066	0.649	0.845	
Fully immunized	0.684	0.045	95	90	0.935	0.065	0.595	0.773	
Total fertility rate	5.450	0.281	NA	1987	1.174	0.051	4.889	6.011	
Neonatal mortality rate	14.686	4.233	1096	1035	0.999	0.288	6.220	23.152	
Infant mortality rate	31.401	5.261	1099	1038	0.944	0.168	20.879	41.922	
Child mortality rate	21.813	5.624	1097	1036	1.148	0.258	10.566	33.060	
Under 5 child mortality rate	52.529	9.257	1100	1039	1.216	0.176	34.014	71.043	
Postneonatal mortality rate	16.715	4.424	1099	1038	1.103	0.265	7.867	25.563	

N.A. = Not Applicable

Table B.1.11 Sampling errors: Western Visayas sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SER)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
Urban	0.476	0.020	882	1045	1.165	0.041	0.437	0.515
No education	0.007	0.003	882	1045	0.996	0.405	0.001	0.012
With education	0.703	0.021	882	1045	1.360	0.030	0.661	0.745
Never Married	0.361	0.013	882	1045	0.830	0.037	0.334	0.387
Currently in union	0.600	0.015	882	1045	0.894	0.025	0.570	0.629
Married before age of 20	0.267	0.018	685	812	1.049	0.066	0.232	0.303
Had first sexual intercourse before 18	0.117	0.010	685	812	0.801	0.084	0.097	0.136
Children ever born	2.215	0.096	882	1045	1.106	0.043	2.024	2.407
Children ever born to women over 40	4.478	0.238	178	211	1.050	0.053	4.002	4.953
Children Surviving	2.070	0.085	882	1045	1.062	0.041	1.900	2.241
Know any method	1.000	0.000	529	627	NA	0.000	1.000	1.000
Know any modern method	1.000	0.000	529	627	NA	0.000	1.000	1.000
Ever used any contraceptive method	0.724	0.023	529	627	1.204	0.032	0.677	0.771
Currently using any method	0.450	0.024	529	627	1.124	0.054	0.401	0.499
Currently using a modern method	0.255	0.020	529	627	1.037	0.077	0.216	0.295
Currently using pill	0.085	0.012	529	627	1.001	0.143	0.061	0.109
Currently using IUD	0.026	0.006	529	627	0.895	0.236	0.014	0.039
Currently using injection	0.030	0.009	529	627	1.142	0.281	0.013	0.047
Currently using condom	0.015	0.007	529	627	1.325	0.465	0.001	0.029
Currently using female sterilization	0.087	0.014	529	627	1.130	0.159	0.059	0.115
Currently using male sterilization	0.006	0.004	529	627	1.287	0.742	0.000	0.014
Currently using periodic abstinence	0.117	0.017	529	627	1.233	0.147	0.083	0.152
Currently using withdrawal	0.070	0.011	529	627	0.998	0.158	0.048	0.092
Public source user	0.788	0.030	137	162	0.853	0.038	0.729	0.848
Want no more children	0.669	0.027	529	627	1.304	0.040	0.616	0.723
Want to delay next birth at least 2 years	0.157	0.018	529	627	1.165	0.117	0.120	0.194
Ideal number of children	3.055	0.052	858	1017	1.306	0.017	2.950	3.159
Mother received tetanus injections	0.781	0.029	494	585	1.340	0.037	0.723	0.840
Received medical care at birth	0.482	0.032	494	585	1.139	0.067	0.417	0.546
Had diarrhea in last 2 weeks	0.091	0.012	482	571	0.865	0.126	0.068	0.114
Received ORS treatment	0.318	0.069	44	52	0.922	0.215	0.181	0.455
Received medical treatment	0.364	0.069	44	52	0.906	0.190	0.225	0.502
Having health card	0.622	0.065	90	107	1.259	0.104	0.493	0.752
Received BCG vaccination	0.967	0.018	90	107	0.966	0.019	0.930	1.000
Received DPT vaccination (3 doses)	0.867	0.037	90	107	1.025	0.042	0.793	0.940
Received polio vaccination (3 doses)	0.878	0.032	90	107	0.932	0.037	0.813	0.942
Received measles vaccination	0.933	0.027	90	107	1.038	0.029	0.879	0.988
Fully immunized	0.867	0.037	90	107	1.025	0.042	0.793	0.940
Total fertility rate	4.023	0.236	NA	2867	1.036	0.059	3.551	4.494
Neonatal mortality rate	11.185	3.282	992	1175	0.907	0.293	4.621	17.748
Infant mortality rate	25.980	5.275	994	1178	1.052	0.203	15.430	36.530
Child mortality rate	16.069	5.027	998	1182	1.243	0.313	6.015	26.123
Under 5 child mortality rate	41.631	7.663	1000	1185	1.197	0.184	26.306	56.956
Postneonatal mortality rate	14.795	4.081	994	1178	1.091	0.276	6.633	22.958

N.A. = Not Applicable

Table B.1.12 Sampling errors: Central Visayas sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
							R-2SE	R+2SE
Urban	0.523	0.018	993	1093	1.109	0.034	0.487	0.558
No education	0.012	0.004	993	1093	1.182	0.339	0.004	0.020
With education	0.660	0.017	993	1093	1.117	0.025	0.626	0.693
Never Married	0.396	0.014	993	1093	0.914	0.036	0.367	0.424
Currently in union	0.567	0.017	993	1093	1.057	0.029	0.534	0.600
Married before age of 20	0.289	0.021	786	865	1.279	0.072	0.247	0.330
Had first sexual intercourse before 18	0.149	0.013	786	865	1.047	0.089	0.122	0.175
Children ever born	2.060	0.075	993	1093	0.964	0.036	1.910	2.210
Children ever born to women over 40	4.353	0.229	190	209	1.075	0.053	3.894	4.812
Children Surviving	1.941	0.067	993	1093	0.928	0.034	1.807	2.074
Know any method	0.996	0.003	563	620	1.007	0.003	0.991	1.000
Know any modern method	0.996	0.003	563	620	1.007	0.003	0.991	1.000
Ever used any contraceptive method	0.787	0.021	563	620	1.207	0.026	0.745	0.829
Currently using any method	0.515	0.029	563	620	1.376	0.056	0.457	0.573
Currently using a modern method	0.281	0.030	563	620	1.590	0.107	0.220	0.341
Currently using pill	0.076	0.012	563	620	1.075	0.158	0.052	0.100
Currently using IUD	0.067	0.016	563	620	1.515	0.237	0.035	0.100
Currently using injection	0.032	0.009	563	620	1.188	0.276	0.014	0.050
Currently using condom	0.032	0.008	563	620	1.078	0.250	0.016	0.048
Currently using female sterilization	0.067	0.010	563	620	0.935	0.147	0.048	0.087
Currently using male sterilization	0.005	0.003	563	620	0.996	0.574	0.000	0.011
Currently using periodic abstinence	0.149	0.014	563	620	0.936	0.094	0.121	0.177
Currently using withdrawal	0.078	0.011	563	620	0.978	0.142	0.056	0.100
Public source user	0.765	0.038	162	178	1.139	0.050	0.689	0.841
Want no more children	0.652	0.021	563	620	1.028	0.032	0.611	0.693
Want to delay next birth at least 2 years	0.169	0.016	563	620	1.004	0.094	0.137	0.200
Ideal number of children	3.019	0.050	972	1070	1.138	0.017	2.918	3.119
Mother received tetanus injections	0.765	0.024	532	586	1.160	0.032	0.716	0.814
Received medical care at birth	0.556	0.044	532	586	1.623	0.079	0.468	0.644
Had diarrhea in last 2 weeks	0.058	0.011	521	573	0.920	0.187	0.036	0.079
Received ORS treatment	0.433	0.084	30	33	0.904	0.194	0.265	0.601
Received medical treatment	0.533	0.108	30	33	1.148	0.202	0.318	0.749
Having health card	0.595	0.055	111	122	1.155	0.092	0.486	0.704
Received BCG vaccination	0.937	0.022	111	122	0.954	0.024	0.893	0.981
Received DPT vaccination (3 doses)	0.901	0.033	111	122	1.159	0.037	0.835	0.967
Received polio vaccination (3 doses)	0.874	0.042	111	122	1.340	0.048	0.789	0.958
Received measles vaccination	0.865	0.031	111	122	0.953	0.036	0.803	0.927
Fully immunized	0.775	0.042	111	122	1.062	0.055	0.690	0.859
Total fertility rate	3.703	0.261	NA	3029	1.234	0.070	3.181	4.224
Neonatal mortality rate	11.511	4.467	1050	1156	1.278	0.388	2.576	20.446
Infant mortality rate	23.616	5.771	1051	1157	1.208	0.244	12.074	35.157
Child mortality rate	15.099	3.517	1054	1160	0.887	0.233	8.065	22.133
Under 5 child mortality rate	38.358	6.779	1055	1161	1.151	0.177	24.800	51.915
Postneonatal mortality rate	12.105	3.335	1051	1157	0.986	0.275	5.435	18.774

N.A. = Not Applicable

Table B.1.13 Sampling errors: Eastern Visayas sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)			R-2SE	R+2SE
Urban	0.335	0.020	770	553	1.189	0.060	0.295	0.376
No education	0.018	0.006	770	553	1.246	0.330	0.006	0.030
With education	0.532	0.024	770	553	1.306	0.044	0.485	0.579
Never Married	0.242	0.015	770	553	0.967	0.062	0.212	0.271
Currently in union	0.714	0.016	770	553	0.975	0.022	0.683	0.746
Married before age of 20	0.508	0.022	628	451	1.100	0.043	0.464	0.552
Had first sexual intercourse before 18	0.298	0.018	628	451	0.991	0.061	0.262	0.334
Children ever born	3.334	0.114	770	553	1.005	0.034	3.107	3.561
Children ever born to women over 40	6.188	0.249	181	130	1.125	0.040	5.691	6.685
Children Surviving	2.966	0.103	770	553	1.041	0.035	2.761	3.172
Know any method	0.995	0.003	550	395	1.000	0.003	0.988	1.000
Know any modern method	0.991	0.004	550	395	0.998	0.004	0.983	0.999
Ever used any contraceptive method	0.638	0.023	550	395	1.112	0.036	0.593	0.684
Currently using any method	0.375	0.021	550	395	1.030	0.057	0.332	0.417
Currently using a modern method	0.167	0.014	550	395	0.855	0.081	0.140	0.195
Currently using pill	0.044	0.009	550	395	1.010	0.202	0.026	0.061
Currently using IUD	0.018	0.006	550	395	1.006	0.316	0.007	0.030
Currently using injection	0.018	0.007	550	395	1.297	0.407	0.003	0.033
Currently using condom	0.011	0.005	550	395	1.022	0.415	0.002	0.020
Currently using female sterilization	0.073	0.012	550	395	1.039	0.158	0.050	0.096
Currently using male sterilization	0.002	0.002	550	395	1.006	1.006	0.000	0.005
Currently using periodic abstinence	0.104	0.014	550	395	1.068	0.134	0.076	0.131
Currently using withdrawal	0.098	0.012	550	395	0.943	0.122	0.074	0.122
Public source user	0.844	0.037	96	69	0.995	0.044	0.770	0.918
Want no more children	0.704	0.019	550	395	0.965	0.027	0.666	0.741
Want to delay next birth at least 2 years	0.142	0.014	550	395	0.945	0.099	0.114	0.170
Ideal number of children	3.459	0.072	749	538	1.107	0.021	3.316	3.603
Mother received tetanus injections	0.682	0.030	622	446	1.239	0.044	0.622	0.742
Received medical care at birth	0.277	0.028	622	446	1.238	0.100	0.221	0.332
Had diarrhea in last 2 weeks	0.130	0.013	583	418	0.848	0.097	0.105	0.156
Received ORS treatment	0.539	0.062	76	55	0.978	0.114	0.416	0.663
Received medical treatment	0.434	0.062	76	55	1.058	0.142	0.311	0.558
Having health card	0.467	0.050	120	86	1.095	0.107	0.367	0.566
Received BCG vaccination	0.825	0.046	120	86	1.336	0.056	0.732	0.918
Received DPT vaccination (3 doses)	0.717	0.045	120	86	1.082	0.062	0.628	0.806
Received polio vaccination (3 doses)	0.750	0.043	120	86	1.095	0.058	0.663	0.837
Received measles vaccination	0.717	0.048	120	86	1.155	0.066	0.622	0.812
Fully immunized	0.625	0.046	120	86	1.029	0.073	0.534	0.716
Total fertility rate	5.911	0.354	NA	1561	1.278	0.060	5.204	6.618
Neonatal mortality rate	31.275	5.196	1256	902	0.953	0.166	20.883	41.667
Infant mortality rate	60.813	7.451	1258	903	1.043	0.123	45.912	75.715
Child mortality rate	26.406	6.056	1262	906	1.112	0.229	14.293	38.518
Under 5 child mortality rate	85.613	9.652	1264	907	1.045	0.113	66.310	104.916
Postneonatal mortality rate	29.538	5.265	1258	903	1.124	0.178	19.009	40.067

N.A. = Not Applicable

Table B.1.14 Sampling errors: Western Mindanao sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases				Confidence limits	
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	R-2SE	R+2SE
Urban	0.350	0.029	973	530	1.880	0.082	0.293	0.408
No education	0.060	0.016	973	530	2.124	0.271	0.027	0.092
With education	0.607	0.033	973	530	2.134	0.055	0.541	0.674
Never Married	0.322	0.019	973	530	1.248	0.058	0.284	0.359
Currently in union	0.647	0.019	973	530	1.264	0.030	0.609	0.686
Married before age of 20	0.403	0.022	767	418	1.256	0.055	0.358	0.447
Had first sexual intercourse before 18	0.207	0.016	767	418	1.100	0.078	0.175	0.240
Children ever born	2.434	0.088	973	530	1.011	0.036	2.257	2.610
Children ever born to women over 40	4.969	0.256	191	104	1.146	0.051	4.457	5.480
Children Surviving	2.225	0.082	973	530	1.044	0.037	2.061	2.390
Know any method	0.908	0.026	630	343	2.242	0.028	0.856	0.960
Know any modern method	0.903	0.027	630	343	2.279	0.030	0.849	0.957
Ever used any contraceptive method	0.610	0.037	630	343	1.884	0.060	0.536	0.683
Currently using any method	0.438	0.031	630	343	1.583	0.072	0.375	0.501
Currently using a modern method	0.300	0.023	630	343	1.279	0.078	0.253	0.347
Currently using pill	0.157	0.020	630	343	1.361	0.126	0.118	0.197
Currently using IUD	0.060	0.014	630	343	1.430	0.225	0.033	0.087
Currently using injection	0.021	0.005	630	343	0.864	0.237	0.011	0.030
Currently using condom	0.017	0.005	630	343	1.014	0.303	0.007	0.028
Currently using female sterilization	0.041	0.009	630	343	1.186	0.228	0.022	0.060
Currently using male sterilization	0.000	0.000	630	343	NA	NA	0.000	0.000
Currently using periodic abstinence	0.097	0.013	630	343	1.084	0.132	0.071	0.122
Currently using withdrawal	0.032	0.008	630	343	1.165	0.257	0.015	0.048
Public source user	0.895	0.021	190	103	0.944	0.024	0.853	0.937
Want no more children	0.589	0.020	630	343	1.028	0.034	0.549	0.629
Want to delay next birth at least 2 years	0.211	0.019	630	343	1.174	0.090	0.173	0.249
Ideal number of children	3.448	0.071	943	513	1.237	0.020	3.306	3.589
Mother received tetanus injections	0.659	0.035	558	304	1.372	0.054	0.589	0.730
Received medical care at birth	0.396	0.043	558	304	1.657	0.108	0.311	0.481
Had diarrhea in last 2 weeks	0.071	0.012	532	290	1.049	0.174	0.047	0.096
Received ORS treatment	0.447	0.061	38	21	0.778	0.137	0.324	0.570
Received medical treatment	0.632	0.093	38	21	1.184	0.147	0.445	0.818
Having health card	0.333	0.048	102	56	1.031	0.144	0.237	0.430
Received BCG vaccination	0.814	0.047	102	56	1.216	0.058	0.720	0.908
Received DPT vaccination (3 doses)	0.716	0.049	102	56	1.105	0.069	0.617	0.814
Received polio vaccination (3 doses)	0.735	0.050	102	56	1.140	0.068	0.636	0.835
Received measles vaccination	0.745	0.053	102	56	1.232	0.071	0.639	0.852
Fully immunized	0.696	0.053	102	56	1.166	0.076	0.590	0.802
Total fertility rate	3.900	0.272	NA	1480	1.302	0.070	3.355	4.445
Neonatal mortality rate	19.489	4.030	1164	634	0.902	0.207	11.429	27.549
Infant mortality rate	44.570	6.143	1166	635	0.982	0.138	32.284	56.856
Child mortality rate	31.713	6.384	1169	636	1.121	0.201	18.946	44.481
Under 5 child mortality rate	74.870	8.788	1171	638	1.071	0.117	57.294	92.446
Postneonatal mortality rate	25.081	4.390	1166	635	0.981	0.175	16.300	33.862

N.A. = Not Applicable

Table B.1.15 Sampling errors: Northern Mindanao sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases				Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	R-2SE		R+2SE	
Urban	0.512	0.027	781	482	1.534	0.054	0.457	0.567	
No education	0.004	0.003	781	482	1.263	0.728	0.000	0.009	
With education	0.661	0.028	781	482	1.644	0.042	0.605	0.716	
Never Married	0.357	0.020	781	482	1.167	0.056	0.317	0.397	
Currently in union	0.612	0.021	781	482	1.191	0.034	0.570	0.654	
Married before age of 20	0.421	0.018	610	377	0.902	0.043	0.385	0.457	
Had first sexual intercourse before 18	0.254	0.020	610	377	1.111	0.077	0.215	0.293	
Children ever born	2.627	0.100	781	482	0.959	0.038	2.428	2.826	
Children ever born to women over 40	5.503	0.269	153	94	1.089	0.049	4.964	6.042	
Children Surviving	2.398	0.093	781	482	1.002	0.039	2.213	2.584	
Know any method	1.000	0.000	478	295	NA	0.000	1.000	1.000	
Know any modern method	1.000	0.000	478	295	NA	0.000	1.000	1.000	
Ever used any contraceptive method	0.751	0.032	478	295	1.632	0.043	0.686	0.816	
Currently using any method	0.540	0.029	478	295	1.281	0.054	0.481	0.598	
Currently using a modern method	0.339	0.026	478	295	1.188	0.076	0.287	0.390	
Currently using pill	0.138	0.018	478	295	1.130	0.129	0.102	0.174	
Currently using IUD	0.100	0.016	478	295	1.149	0.157	0.069	0.132	
Currently using injection	0.031	0.010	478	295	1.281	0.326	0.011	0.052	
Currently using condom	0.013	0.004	478	295	0.806	0.328	0.004	0.021	
Currently using female sterilization	0.052	0.011	478	295	1.088	0.212	0.030	0.074	
Currently using male sterilization	0.000	0.000	478	295	NA	NA	0.000	0.000	
Currently using periodic abstinence	0.126	0.014	478	295	0.895	0.108	0.098	0.153	
Currently using withdrawal	0.075	0.013	478	295	1.068	0.171	0.050	0.101	
Public source user	0.785	0.034	163	101	1.040	0.043	0.718	0.852	
Want no more children	0.678	0.021	478	295	0.984	0.031	0.636	0.720	
Want to delay next birth at least 2 years	0.205	0.017	478	295	0.945	0.085	0.170	0.240	
Ideal number of children	3.102	0.076	774	478	1.459	0.024	2.951	3.253	
Mother received tetanus injections	0.711	0.028	536	331	1.172	0.039	0.655	0.767	
Received medical care at birth	0.345	0.041	536	331	1.536	0.118	0.264	0.427	
Had diarrhea in last 2 weeks	0.052	0.014	517	319	1.300	0.259	0.025	0.079	
Received ORS treatment	0.519	0.095	27	17	0.930	0.184	0.328	0.709	
Received medical treatment	0.556	0.114	27	17	1.202	0.206	0.327	0.784	
Having health card	0.365	0.056	104	64	1.190	0.154	0.253	0.478	
Received BCG vaccination	0.942	0.026	104	64	1.147	0.028	0.890	0.995	
Received DPT vaccination (3 doses)	0.875	0.036	104	64	1.099	0.041	0.804	0.946	
Received polio vaccination (3 doses)	0.875	0.032	104	64	0.983	0.036	0.811	0.939	
Received measles vaccination	0.769	0.034	104	64	0.814	0.044	0.702	0.837	
Fully immunized	0.740	0.039	104	64	0.914	0.053	0.662	0.819	
Total fertility rate	4.753	0.342	NA	1337	1.307	0.072	4.069	5.438	
Neonatal mortality rate	21.095	4.256	1005	621	0.880	0.202	12.584	29.606	
Infant mortality rate	40.970	6.771	1005	621	1.028	0.165	27.429	54.512	
Child mortality rate	24.811	7.112	1008	622	1.215	0.287	10.586	39.035	
Under 5 child mortality rate	64.765	9.334	1008	622	1.078	0.144	46.097	83.433	
Postneonatal mortality rate	19.875	4.324	1005	621	1.024	0.218	11.227	28.523	

N.A. = Not Applicable

Table B.1.16 Sampling errors: Southern Mindanao sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases			Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un- weighted (N)	Weight- ed (WN)	R-2SE			R-2SE	R+2SE
Urban	0.487	0.028	985	925	1.788	0.058	0.430	0.544	
No education	0.020	0.007	985	925	1.604	0.355	0.006	0.035	
With education	0.731	0.027	985	925	1.917	0.037	0.677	0.785	
Never Married	0.353	0.020	985	925	1.325	0.057	0.313	0.394	
Currently in union	0.618	0.020	985	925	1.284	0.032	0.579	0.658	
Married before age of 20	0.364	0.026	766	719	1.489	0.071	0.312	0.416	
Had first sexual intercourse before 18	0.222	0.017	766	719	1.148	0.078	0.187	0.256	
Children ever born	2.189	0.109	985	925	1.312	0.050	1.971	2.407	
Children ever born to women over 40	4.631	0.304	179	168	1.336	0.066	4.024	5.239	
Children Surviving	2.017	0.096	985	925	1.282	0.048	1.824	2.210	
Know any method	0.993	0.003	609	572	1.028	0.003	0.987	1.000	
Know any modern method	0.992	0.003	609	572	0.803	0.003	0.986	0.998	
Ever used any contraceptive method	0.787	0.020	609	572	1.198	0.025	0.747	0.826	
Currently using any method	0.552	0.020	609	572	0.994	0.036	0.512	0.592	
Currently using a modern method	0.358	0.016	609	572	0.845	0.046	0.325	0.391	
Currently using pill	0.144	0.014	609	572	1.012	0.100	0.116	0.173	
Currently using IUD	0.094	0.012	609	572	1.054	0.133	0.069	0.118	
Currently using injection	0.034	0.011	609	572	1.463	0.314	0.013	0.056	
Currently using condom	0.015	0.004	609	572	0.899	0.298	0.006	0.024	
Currently using female sterilization	0.069	0.013	609	572	1.225	0.183	0.044	0.094	
Currently using male sterilization	0.000	0.000	609	572	NA	NA	0.000	0.000	
Currently using periodic abstinence	0.126	0.015	609	572	1.096	0.117	0.097	0.156	
Currently using withdrawal	0.062	0.009	609	572	0.941	0.148	0.044	0.081	
Public source user	0.766	0.040	222	209	1.392	0.052	0.686	0.845	
Want no more children	0.635	0.021	609	572	1.078	0.033	0.593	0.678	
Want to delay next birth at least 2 years	0.220	0.016	609	572	0.975	0.074	0.187	0.253	
Ideal number of children	2.918	0.046	979	920	1.216	0.016	2.825	3.011	
Mother received tetanus injections	0.726	0.026	521	489	1.058	0.035	0.674	0.777	
Received medical care at birth	0.470	0.043	521	489	1.505	0.090	0.385	0.555	
Had diarrhea in last 2 weeks	0.090	0.013	499	469	0.990	0.144	0.064	0.116	
Received ORS treatment	0.422	0.088	45	42	1.138	0.208	0.247	0.598	
Received medical treatment	0.400	0.072	45	42	0.990	0.180	0.256	0.544	
Having health card	0.575	0.046	87	82	0.872	0.080	0.482	0.667	
Received BCG vaccination	0.966	0.019	87	82	0.996	0.020	0.927	1.000	
Received DPT vaccination (3 doses)	0.920	0.030	87	82	1.033	0.033	0.859	0.980	
Received polio vaccination (3 doses)	0.920	0.030	87	82	1.033	0.033	0.859	0.980	
Received measles vaccination	0.839	0.046	87	82	1.162	0.055	0.748	0.931	
Fully immunized	0.828	0.047	87	82	1.167	0.057	0.733	0.922	
Total fertility rate	3.666	0.242	NA	2557	1.190	0.066	3.182	4.150	
Neonatal mortality rate	19.139	5.052	1050	986	1.058	0.264	9.035	29.243	
Infant mortality rate	40.938	6.564	1051	987	0.976	0.160	27.811	54.065	
Child mortality rate	21.115	5.503	1054	990	1.150	0.261	10.108	32.122	
Under 5 child mortality rate	61.188	9.878	1055	991	1.194	0.161	41.433	80.943	
Postneonatal mortality rate	21.799	5.062	1051	987	1.020	0.232	11.676	31.922	

N.A. = Not Applicable

Table B.1.17 Sampling errors: Central Mindanao sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SER)	Confidence limits	
							R-2SE	R+2SE
Urban	0.333	0.022	682	425	1.209	0.066	0.289	0.376
No education	0.026	0.011	682	425	1.718	0.400	0.005	0.048
With education	0.751	0.025	682	425	1.509	0.033	0.701	0.801
Never Married	0.330	0.017	682	425	0.924	0.050	0.297	0.363
Currently in union	0.642	0.017	682	425	0.939	0.027	0.608	0.677
Married before age of 20	0.389	0.020	525	327	0.955	0.052	0.348	0.429
Had first sexual intercourse before 18	0.194	0.016	525	327	0.902	0.080	0.163	0.225
Children ever born	2.405	0.116	682	425	1.134	0.048	2.173	2.636
Children ever born to women over 40	5.168	0.205	113	70	0.703	0.040	4.758	5.579
Children Surviving	2.192	0.109	682	425	1.188	0.050	1.973	2.411
Know any method	0.984	0.007	438	273	1.151	0.007	0.970	0.998
Know any modern method	0.984	0.007	438	273	1.151	0.007	0.970	0.998
Ever used any contraceptive method	0.655	0.030	438	273	1.298	0.045	0.596	0.714
Currently using any method	0.452	0.038	438	273	1.583	0.083	0.377	0.527
Currently using a modern method	0.285	0.023	438	273	1.067	0.081	0.239	0.331
Currently using pill	0.080	0.015	438	273	1.193	0.194	0.049	0.111
Currently using IUD	0.073	0.014	438	273	1.093	0.186	0.046	0.100
Currently using injection	0.034	0.008	438	273	0.868	0.221	0.019	0.049
Currently using condom	0.009	0.005	438	273	1.042	0.519	0.000	0.019
Currently using female sterilization	0.087	0.016	438	273	1.185	0.184	0.055	0.119
Currently using male sterilization	0.002	0.002	438	273	1.017	0.017	0.000	0.007
Currently using periodic abstinence	0.103	0.017	438	273	1.164	0.165	0.069	0.137
Currently using withdrawal	0.057	0.018	438	273	1.577	0.307	0.022	0.092
Public source user	0.746	0.037	126	79	0.953	0.050	0.672	0.820
Want no more children	0.626	0.026	438	273	1.102	0.041	0.575	0.677
Want to delay next birth at least 2 years	0.171	0.019	438	273	1.029	0.108	0.134	0.208
Ideal number of children	3.352	0.100	665	415	1.201	0.030	3.151	3.553
Mother received tetanus injections	0.740	0.032	423	264	1.239	0.044	0.675	0.805
Received medical care at birth	0.430	0.042	423	264	1.395	0.097	0.347	0.514
Had diarrhea in last 2 weeks	0.086	0.013	406	253	0.961	0.153	0.060	0.113
Received ORS treatment	0.314	0.086	35	22	1.083	0.274	0.142	0.487
Received medical treatment	0.343	0.081	35	22	1.037	0.236	0.181	0.505
Having health card	0.324	0.050	74	46	0.913	0.153	0.225	0.424
Received BCG vaccination	0.878	0.037	74	46	0.965	0.042	0.805	0.952
Received DPT vaccination (3 doses)	0.770	0.058	74	46	1.177	0.075	0.655	0.885
Received polio vaccination (3 doses)	0.784	0.056	74	46	1.163	0.071	0.672	0.895
Received measles vaccination	0.770	0.052	74	46	1.054	0.067	0.667	0.873
Fully immunized	0.716	0.061	74	46	1.163	0.085	0.594	0.838
Total fertility rate	4.219	0.267	NA	1184	1.111	0.063	3.685	4.752
Neonatal mortality rate	26.995	6.644	861	537	1.062	0.246	13.708	40.282
Infant mortality rate	48.367	10.072	861	537	1.112	0.208	28.223	68.510
Child mortality rate	28.969	7.824	866	540	1.079	0.270	13.321	44.616
Under 5 child mortality rate	75.934	13.776	866	540	1.223	0.181	48.382	103.487
Postneonatal mortality rate	21.372	6.455	861	537	1.259	0.302	8.462	34.282

N.A. = Not Applicable

Table B.I.18 Sampling errors: ARMM sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
							R-2SE	R+2SE
Urban	0.222	0.019	810	385	1.329	0.087	0.183	0.261
No education	0.259	0.048	810	385	3.116	0.185	0.163	0.355
With education	0.438	0.054	810	385	3.099	0.123	0.330	0.546
Never Married	0.314	0.015	810	385	0.926	0.048	0.283	0.344
Currently in union	0.654	0.015	810	385	0.878	0.022	0.625	0.684
Married before age of 20	0.479	0.027	635	301	1.384	0.057	0.424	0.534
Had first sexual intercourse before 18	0.298	0.023	635	301	1.240	0.076	0.253	0.343
Children ever born	2.742	0.114	810	385	1.132	0.042	2.514	2.970
Children ever born to women over 40	5.101	0.313	138	66	1.284	0.061	4.476	5.727
Children Surviving	2.428	0.095	810	385	1.093	0.039	2.238	2.619
Know any method	0.762	0.032	530	252	1.704	0.041	0.699	0.825
Know any modern method	0.617	0.043	530	252	2.018	0.069	0.532	0.702
Ever used any contraceptive method	0.183	0.034	530	252	2.025	0.186	0.115	0.251
Currently using any method	0.158	0.029	530	252	1.844	0.185	0.100	0.217
Currently using a modern method	0.087	0.025	530	252	2.069	0.292	0.036	0.137
Currently using pill	0.036	0.012	530	252	1.503	0.339	0.012	0.060
Currently using IUD	0.002	0.002	530	252	0.995	0.995	0.000	0.006
Currently using injection	0.019	0.009	530	252	1.470	0.461	0.001	0.036
Currently using condom	0.000	0.000	530	252	NA	NA	0.000	0.000
Currently using female sterilization	0.030	0.010	530	252	1.320	0.325	0.011	0.050
Currently using male sterilization	0.000	0.000	530	252	NA	NA	0.000	0.000
Currently using periodic abstinence	0.017	0.006	530	252	1.127	0.373	0.004	0.030
Currently using withdrawal	0.008	0.004	530	252	0.991	0.494	0.000	0.015
Public source user	0.783	0.041	46	22	0.659	0.052	0.702	0.864
Want no more children	0.226	0.021	530	252	1.169	0.094	0.184	0.269
Want to delay next birth at least 2 years	0.289	0.021	530	252	1.059	0.072	0.247	0.330
Ideal number of children	5.830	0.188	728	346	1.770	0.032	5.454	6.206
Mother received tetanus injections	0.388	0.040	554	263	1.526	0.104	0.307	0.469
Received medical care at birth	0.155	0.030	554	263	1.584	0.196	0.094	0.216
Had diarrhea in last 2 weeks	0.062	0.015	519	246	1.289	0.238	0.032	0.091
Received ORS treatment	0.500	0.096	32	15	1.125	0.193	0.307	0.693
Received medical treatment	0.344	0.080	32	15	0.957	0.233	0.183	0.504
Having health card	0.220	0.072	109	52	1.711	0.328	0.076	0.365
Received BCG vaccination	0.651	0.051	109	52	1.098	0.078	0.550	0.753
Received DPT vaccination (3 doses)	0.505	0.055	109	52	1.128	0.109	0.395	0.615
Received polio vaccination (3 doses)	0.505	0.055	109	52	1.128	0.109	0.395	0.615
Received measles vaccination	0.505	0.054	109	52	1.097	0.106	0.398	0.612
Fully immunized	0.468	0.056	109	52	1.141	0.119	0.357	0.579
Total fertility rate	4.606	0.428	NA	1071	1.529	0.093	3.749	5.463
Neonatal mortality rate	23.579	6.273	1199	569	1.304	0.266	11.032	36.126
Infant mortality rate	55.108	10.220	1200	570	1.353	0.185	34.668	75.548
Child mortality rate	44.964	8.647	1209	574	1.140	0.192	27.669	62.258
Under 5 child mortality rate	97.593	15.931	1210	574	1.502	0.163	65.731	129.455
Postneonatal mortality rate	31.529	6.511	1200	570	1.183	0.206	18.507	44.550

N.A. = Not Applicable

Table B.1.19 Sampling errors: CARAGA sample, Philippines 1998

Variables	Value (R)	Standard error (SE)	Number of cases					
			Un- weighted (N)	Weight- ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
							R-2SE	R+2SE
Urban	0.438	0.018	723	323	1.001	0.042	0.401	0.475
No education	0.008	0.003	723	323	0.822	0.334	0.003	0.014
With education	0.650	0.035	723	323	1.956	0.053	0.581	0.720
Never Married	0.313	0.014	723	323	0.825	0.046	0.284	0.341
Currently in union	0.646	0.014	723	323	0.789	0.022	0.618	0.674
Married before age of 20	0.395	0.026	570	254	1.291	0.067	0.342	0.448
Had first sexual intercourse before 18	0.216	0.022	570	254	1.264	0.101	0.172	0.259
Children ever born	2.849	0.103	723	323	0.907	0.036	2.644	3.054
Children ever born to women over 40	5.649	0.222	168	75	0.940	0.039	5.205	6.092
Children Surviving	2.548	0.093	723	323	0.946	0.037	2.361	2.735
Know any method	1.000	0.000	467	208	NA	0.000	1.000	1.000
Know any modern method	0.998	0.002	467	208	0.997	0.002	0.994	1.000
Ever used any contraceptive method	0.730	0.026	467	208	1.278	0.036	0.678	0.783
Currently using any method	0.488	0.028	467	208	1.226	0.058	0.431	0.545
Currently using a modern method	0.287	0.022	467	208	1.064	0.078	0.242	0.332
Currently using pill	0.088	0.013	467	208	0.988	0.148	0.062	0.114
Currently using IUD	0.069	0.017	467	208	1.436	0.245	0.035	0.102
Currently using injection	0.041	0.012	467	208	1.274	0.287	0.017	0.064
Currently using condom	0.013	0.004	467	208	0.816	0.331	0.004	0.021
Currently using female sterilization	0.075	0.011	467	208	0.929	0.151	0.052	0.098
Currently using male sterilization	0.002	0.002	467	208	1.001	1.001	0.000	0.006
Currently using periodic abstinence	0.124	0.016	467	208	1.045	0.129	0.092	0.156
Currently using withdrawal	0.062	0.013	467	208	1.183	0.213	0.036	0.089
Public source user	0.833	0.027	138	62	0.851	0.033	0.779	0.888
Want no more children	0.702	0.017	467	208	0.813	0.025	0.668	0.737
Want to delay next birth at least 2 years	0.193	0.019	467	208	1.049	0.099	0.154	0.231
Ideal number of children	3.180	0.046	722	322	0.875	0.014	3.088	3.272
Mother received tetanus injections	0.732	0.035	441	197	1.335	0.047	0.663	0.802
Received medical care at birth	0.401	0.039	441	197	1.317	0.097	0.324	0.479
Had diarrhea in last 2 weeks	0.073	0.010	413	184	0.756	0.143	0.052	0.093
Received ORS treatment	0.467	0.130	30	13	1.318	0.279	0.206	0.727
Received medical treatment	0.600	0.115	30	13	1.177	0.191	0.370	0.830
Having health card	0.438	0.068	89	40	1.287	0.155	0.303	0.574
Received BCG vaccination	0.933	0.028	89	40	1.041	0.030	0.877	0.988
Received DPT vaccination (3 doses)	0.854	0.041	89	40	1.082	0.047	0.773	0.935
Received polio vaccination (3 doses)	0.876	0.044	89	40	1.268	0.051	0.788	0.965
Received measles vaccination	0.876	0.033	89	40	0.938	0.037	0.811	0.942
Fully immunized	0.787	0.045	89	40	1.031	0.057	0.697	0.876
Total fertility rate	4.648	0.323	NA	893	1.063	0.069	4.003	5.294
Neonatal mortality rate	28.556	7.018	918	410	1.037	0.246	14.521	42.591
Infant mortality rate	53.179	9.014	920	411	1.059	0.169	35.151	71.206
Child mortality rate	31.012	6.904	929	415	1.115	0.223	17.205	44.820
Under 5 child mortality rate	82.542	11.242	931	416	1.119	0.136	60.057	105.027
Postneonatal mortality rate	24.623	5.610	920	411	0.997	0.228	13.403	35.843

N.A. = Not Applicable



## **APPENDIX C**

### **QUALITY OF THE DATA: NONSAMPLING ERRORS**



## **APPENDIX C**

### **QUALITY OF THE DATA: NONSAMPLING ERRORS**

While Appendix B provides sampling errors for selected variables presented in the report, this appendix is presented to provide data users an initial overview of the data quality. For this purpose, misreporting of ages, respondent's recall problems and other problems encountered during data collection are investigated in Appendix C.

Presented in Table C.1 is the distribution by single years of age of the household population. Overall, slight heaping on ages ending with 0 and 5 is detected throughout all ages for both sexes. Errors are particularly notable in the age reporting at ages 15 and 49 years—the lower and upper limits of eligibility for individual in the NDHS interview. The age ratios at 15 for women is 1.00, while for men it is 0.95 indicating a better age reporting by the females at this age. At age 49, the ratios are 0.93 and 0.97 for women and men, respectively, demonstrating the tendency for both males and females to either understate or overstate their age.

In Table C.2, household weights are applied to the age distribution of women reported in the individual interview, to investigate if there is a bias in the age reporting in the individual woman's interview. The table shows the expected pattern of declining percentage as age increases, and that there is virtually no difference between the age distribution of women recorded in the household schedule and those interviewed with the individual questionnaire, indicating the absence of a bias. This table also shows that response rates vary slightly across the age of the respondents.

Information on the completeness of reporting in connection with a set of important variables is provided in Table C.3. With the exception of information on child's size at birth, the percentage of cases with missing information is extraordinarily low, and information on dating of events seem to be complete.

According to Table C.4, there is a slight heaping in the reported total number of births in 1990 and the number of children still living. Information on month and year of birth is available for virtually all children. Birth dates of dead children are less complete than for surviving children; nevertheless, this information is known for 95.8 percent of children. The overall sex ratio at birth for all births is 106, while from year to year there are fluctuations without any indication of bias except for 1995 when overall sex ratio at birth was unusually high at 127. Sex ratio for dead children is much higher than for surviving children, indicating higher mortality among male children. The calendar ratios show that there was a transference of births from 1991 to the earlier and later years. The ratio of births in 1991 to the average of the two adjoining years is 0.96, while the ratios for 1990 and 1991 are 1.02 and 1.06, respectively.

The percentage of early neonatal deaths (deaths within the first 7 days after birth) among all neonatal deaths (deaths within the first month of birth) increases as infant mortality decreases (Table C.5). However, a decreasing proportion of neonatal among infant deaths is shown in Table C.6. It should also be noted that heaping at age 12 months is more apparent in the more distant past (5 years or more prior to the survey) than in the most recent period, demonstrating that reporting of age at death is improving.

Table C.1 Household age distribution

Single-year age distribution of the de jure household population by sex (weighted), Philippines 1998

Age	Males		Females		Age	Males		Females	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
<1	894	3.0	762	2.5	36	323	1.1	374	1.2
1	799	2.7	765	2.5	37	368	1.2	375	1.2
2	833	2.8	731	2.4	38	355	1.2	402	1.3
3	840	2.8	728	2.4	39	367	1.2	353	1.2
4	835	2.8	762	2.5	40	322	1.1	316	1.0
5	822	2.7	826	2.7	41	234	0.8	326	1.1
6	870	2.9	771	2.5	42	314	1.0	358	1.2
7	824	2.7	823	2.7	43	315	1.1	291	1.0
8	763	2.5	801	2.6	44	259	0.9	277	0.9
9	791	2.6	733	2.4	45	302	1.0	280	0.9
10	786	2.6	755	2.5	46	233	0.8	232	0.8
11	718	2.4	682	2.2	47	232	0.8	234	0.8
12	748	2.5	677	2.2	48	251	0.8	254	0.8
13	701	2.3	721	2.4	49	237	0.8	240	0.8
14	718	2.4	727	2.4	50	239	0.8	263	0.9
15	653	2.2	685	2.3	51	160	0.5	221	0.7
16	656	2.2	646	2.1	52	204	0.7	237	0.8
17	614	2.0	624	2.1	53	187	0.6	193	0.6
18	670	2.2	631	2.1	54	168	0.6	207	0.7
19	604	2.0	527	1.7	55	165	0.5	251	0.8
20	554	1.8	532	1.8	56	169	0.6	175	0.6
21	503	1.7	509	1.7	57	150	0.5	168	0.6
22	509	1.7	494	1.6	58	164	0.5	177	0.6
23	442	1.5	472	1.6	59	132	0.4	159	0.5
24	455	1.5	433	1.4	60	198	0.7	212	0.7
25	492	1.6	530	1.7	61	114	0.4	125	0.4
26	426	1.4	441	1.5	62	133	0.4	151	0.5
27	431	1.4	499	1.6	63	107	0.4	143	0.5
28	472	1.6	486	1.6	64	102	0.3	108	0.4
29	455	1.5	420	1.4	65	124	0.4	152	0.5
30	439	1.5	455	1.5	66	69	0.2	92	0.3
31	418	1.4	407	1.3	67	81	0.3	99	0.3
32	392	1.3	438	1.4	68	79	0.3	104	0.3
33	424	1.4	457	1.5	69	65	0.2	74	0.2
34	403	1.3	420	1.4	70+	677	2.3	940	3.1
35	419	1.4	429	1.4	Don't know/ missing	9	0.0	8	0.0
			Total	29980	100.0	30369	100.0		

Note: The de jure population includes all usual residents.

Table C.2 Age distribution of eligible and interviewed women

Percent distribution in five-year age groups of the de jure household population of women age 10-54 and of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), Philippines 1998

Age	Household population of women age 15-49		Interviewed women age 15-49		Percentage interviewed (weighted)
	Number	Percent	Number	Percent	
10-14	3563	NA	NA	NA	NA
15-19	3113	21.0	3028	21.0	97.3
20-24	2440	16.4	2358	16.4	96.6
25-29	2375	16.0	2291	15.9	96.5
30-34	2177	14.7	2123	14.7	97.5
35-39	1933	13.0	1896	13.2	98.1
40-44	1568	10.6	1519	10.5	96.9
45-49	1240	8.4	1201	8.3	96.8
50-54	1120	NA	-	NA	NA
15-49	14847	NA	14416	NA	97.1

Note: The de jure population includes all residents.

NA = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Philippines 1998

Subject	Reference group	Percentage missing information	Number of cases
Birth date	Births in last 15 years		
Month only		0.7	21268
Month and year		0.0	21268
Age at death	Deaths to births in last 15 years	0.2	1264
Age/date at first union <sup>1</sup>	Ever-married women	0.2	8896
Respondent's education	All women	0.0	13983
Child's size at birth	Births in last 59 months	5.9	4773
Diarrhea in last 2 weeks	Living children age 0-59 months	1.2	7286

<sup>1</sup>Both year and age missing

**Table C.4 Births by calendar year since birth**

Distribution of births by calendar years since birth for living (L), dead (D), and all (T) children, according to reporting completeness, sex ratio at birth, and ratio of births by calendar year, Philippines 1998

Year	Number of births			Percentage with complete birth date <sup>1</sup>			Sex ratio at birth <sup>2</sup>			Calendar ratio <sup>3</sup>			Male			Female		
	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T	L	D	T
98	356	7	363	100.0	100.0	100.0	103.7	60.6	102.7	-	-	-	181	3	184	175	4	179
97	1544	42	1586	100.0	100.0	100.0	112.7	166.9	113.8	168.6	134.6	167.5	818	26	844	726	16	742
96	1476	56	1532	100.0	100.0	100.0	104.7	74.0	103.4	99.5	107.8	99.7	755	24	779	721	32	753
95	1424	61	1485	99.9	100.0	99.9	125.0	174.0	126.7	98.5	101.3	98.6	791	39	830	633	22	655
94	1415	65	1480	99.9	100.0	99.9	106.3	132.5	107.3	98.5	94.6	98.4	729	37	766	686	28	714
93	1448	76	1525	99.8	100.0	99.8	103.0	91.7	102.4	99.5	89.6	98.9	735	37	771	714	40	753
92	1497	105	1602	99.1	97.7	99.0	101.0	152.4	103.7	104.5	134.8	106.1	752	64	816	745	42	787
91	1416	80	1496	99.2	96.5	99.1	113.1	118.5	113.4	97.0	84.2	96.2	751	43	795	664	37	701
90	1422	85	1507	99.1	91.8	98.7	98.5	150.6	100.9	101.8	100.5	101.7	706	51	757	716	34	750
89	1377	89	1466	99.3	91.4	98.8	96.9	129.6	98.6	-	-	-	678	50	728	700	39	738
94-98	6214	231	6445	99.9	100.0	99.9	111.3	125.6	111.8	-	-	-	3274	129	3402	2940	102	3043
89-93	7161	435	7596	99.3	95.4	99.1	102.3	128.3	103.7	-	-	-	3622	245	3867	3539	191	3730
84-88	5859	529	6389	99.3	95.5	99.0	106.1	120.6	107.2	-	-	-	3016	289	3305	2844	240	3083
79-83	4589	462	5050	99.2	96.2	98.9	102.3	143.3	105.4	-	-	-	2320	272	2592	2269	190	2458
<79	4161	500	4661	99.0	94.1	98.5	96.9	138.5	100.7	-	-	-	2048	290	2338	2113	210	2323
All	27984	2157	30141	99.4	95.8	99.1	104.2	131.4	105.9	-	-	-	14280	1225	15504	13704	932	14637

NA = Not applicable

<sup>1</sup>Both year and month of birth given

<sup>2</sup>(B<sub>m</sub>/B<sub>f</sub>) \* 100, where B<sub>m</sub> and B<sub>f</sub> are the numbers of male and female births, respectively

<sup>3</sup>[2B<sub>x</sub>/(B<sub>x-1</sub> + B<sub>x+1</sub>)] \* 100, where B<sub>x</sub> is the number of births in the calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under 1 month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey, Philippines 1998

Age at death (in days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	35	49	51	27	163
1	22	30	36	24	112
2	12	8	8	7	35
3	18	13	14	7	53
4	7	3	3	4	18
5	6	14	7	6	32
6	5	0	2	3	11
7	7	14	25	22	67
8	0	2	0	2	5
9	1	3	4	1	10
10	2	4	3	0	9
12	2	0	1	2	5
13	0	1	1	0	2
14	4	3	5	2	14
15	1	2	4	2	8
16	0	0	0	3	3
17	0	0	1	1	2
18	0	0	1	0	1
19	0	4	0	1	4
20	2	0	0	0	2
21	0	2	1	1	5
22	1	0	0	0	2
23	1	0	0	6	6
25	0	0	1	0	1
27	1	0	2	0	2
29	0	0	1	0	1
30	0	1	0	2	2
Total 0-30	129	153	172	123	576
Percent early neonatal <sup>1</sup>	82.0	77.0	70.6	63.9	73.4

<sup>1</sup>(0-6 days/0-30 days) \* 100

Table C.6 Reporting of age at death in months

Distribution of reported deaths under 2 years of age by age at death in months and the percentage of infant deaths reported to occur at ages under one month, for five-year periods of birth preceding the survey, Philippines 1998

Age at death (in months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 <sup>a</sup>	129	153	172	123	576
1	21	20	24	21	86
2	17	11	12	5	44
3	10	17	7	11	46
4	15	8	3	4	30
5	2	9	12	10	33
6	4	8	5	3	20
7	10	14	13	14	50
8	6	13	6	17	43
9	17	12	11	9	49
10	2	9	6	7	24
11	7	5	13	9	34
12	15	49	53	38	156
13	1	1	2	5	9
14	1	2	3	6	12
15	3	1	1	1	5
16	2	1	3	1	7
17	1	1	1	0	4
18	3	3	4	8	17
19	0	2	0	0	3
20	0	0	1	0	2
21	0	0	1	0	1
22	0	0	2	0	3
23	1	1	1	3	6
1 year	0	3	2	1	5
Total 0-11	240	279	284	232	1035
Percent neonatal <sup>b</sup>	53.7	54.8	60.4	52.9	55.6

<sup>a</sup>Includes deaths under 1 month reported in days

<sup>b</sup>(Under 1 month/under 1 year) \* 100

## **APPENDIX D**

### **PERSONS INVOLVED IN THE 1998 NATIONAL DEMOGRAPHIC AND HEALTH SURVEY**



## **APPENDIX D**

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**APPENDIX E**

**SURVEY QUESTIONNAIRES**



Republic of the Philippines  
 NATIONAL STATISTICS OFFICE  
 1998 NATIONAL DEMOGRAPHIC AND HEALTH SURVEY  
 HOUSEHOLD QUESTIONNAIRE

Set \_\_\_\_ of \_\_\_\_ sets

Confidentiality: This survey is authorized by Commonwealth Act No. 591. All information is strictly confidential.

IDENTIFICATION

PROVINCE _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CITY /MUNICIPALITY _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BARANGAY _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
URBAN/RURAL (URBAN=1, RURAL=2) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDS SAMPLE NUMBER .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HOUSEHOLD CONTROL NUMBER .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NDHS HOUSEHOLD SEQUENTIAL NUMBER .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME OF HOUSEHOLD HEAD _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ADDRESS _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <input type="checkbox"/> <input type="checkbox"/>
INTERVIEWER'S NAME	_____	_____	_____	MONTH <input type="checkbox"/>
RESULT*	_____	_____	_____	YEAR <input type="checkbox"/> 1 <input type="checkbox"/> 9 <input type="checkbox"/> 8 INT. CODE <input type="checkbox"/> RESULT* <input type="checkbox"/>
NEXT VISIT: DATE	_____	_____	_____	TOTAL NO. OF VISITS <input type="checkbox"/>
TIME	_____	_____	_____	

\*RESULT CODES :

- 01 COMPLETED, ORIGINAL HOUSEHOLD
- 02 COMPLETED, PRESENT OCCUPANT OF DWELLING
- 03 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
- 04 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
- 05 POSTPONED
- 06 REFUSED
- 07 DWELLING VACANT OR ADDRESS NOT A DWELLING
- 08 DWELLING DESTROYED
- 09 DWELLING NOT FOUND
- 10 OTHER \_\_\_\_\_  
(SPECIFY)

TOTAL HH MEMBERS <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
TOTAL ELIGIBLE WOMEN <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
LINE NO. OF RESP. IN HOUSEHOLD SCHEDULE <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

LANGUAGE OF QUESTIONNAIRE: ENGLISH

SUPERVISOR NAME _____ <input type="checkbox"/> <input type="checkbox"/>	FIELD EDITOR NAME _____ <input type="checkbox"/> <input type="checkbox"/>	OFFICE EDITOR DATE _____ <input type="checkbox"/> <input type="checkbox"/>	KEYED BY <input type="checkbox"/> <input type="checkbox"/>
--	--	---	---

**HOUSEHOLD SCHEDULE**

Now I would like to ask you some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF THE HOUSEHOLD*	RESIDENCE		SEX	AGE
			Does (NAME) usually live here?	Did (NAME) sleep here last night?		
Please give me the names of the persons who usually live in your household and guests of the household who slept here last night, starting with the head of the household						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01		<input type="checkbox"/> <input type="checkbox"/>	YES 1      2	YES 1      2	M 1      2	IN YEARS <input type="checkbox"/> <input type="checkbox"/>
02		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
03		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
04		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
05		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
06		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
07		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
08		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
09		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
10		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
11		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
12		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
13		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
14		<input type="checkbox"/> <input type="checkbox"/>	1      2	1      2	1      2	<input type="checkbox"/> <input type="checkbox"/>
TICK HERE IF CONTINUATION SET IS USED <input type="checkbox"/>						
Just to make sure that I have a complete listing:						
1)	Are there any other persons such as small children or infants that we have not listed?	YES	<input type="checkbox"/>	ENTER EACH IN TABLE	NO	<input type="checkbox"/>
2)	In addition, are there any other people who may not be members of your family, such as domestic servants, lodgers or friends who usually live here?	YES	<input type="checkbox"/>	ENTER EACH IN TABLE	NO	<input type="checkbox"/>
3)	Are there any guests or temporary visitors staying here, or anyone else who slept here last night that have not been listed?	YES	<input type="checkbox"/>	ENTER EACH IN TABLE	NO	<input type="checkbox"/>

\*CODES FOR Q.3

RELATIONSHIP TO HEAD OF HOUSEHOLD:

01 = HEAD

02 = WIFE OR HUSBAND

03 = SON OR DAUGHTER

04 = SON-IN-LAW OR DAUGHTER-IN-LAW

05 = GRANDCHILD

06 = PARENT

07 = PARENT-IN-LAW

08 = BROTHER OR SISTER

09 = OTHER RELATIVE

10 = ADOPTED/FOSTER/STEP CHILD

11 = NOT RELATED

98 = DON'T KNOW

## HOUSEHOLD SCHEDULE

EDUCATION				RESIDENCE				ELIGIBILITY CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49
IF AGE IS 6 YEARS OR OLDER				MOTHER'S USUAL RESIDENCE AT PERSON'S BIRTH		IF AGE IS 5 YEARS OR OLDER RESIDENCE IN JANUARY 1993		
Has (NAME) ever been to school?	IF ATTENDED SCHOOL			At the time (NAME) was born, where was his/her mother's province of usual residence? ***		In what province did (NAME) reside in January 1993? ***		
		What is the highest grade/year (NAME) completed?**	IF AGE IS LESS THAN 25 YEARS	Is (NAME) still in school?				
(8)	(9)	(10)		(11)		(12)	(13)	
YES    NO	GRADE/YEAR	YES    NO						
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	01	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	02	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	03	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	04	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	05	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	06	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	07	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	08	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	09	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	10	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	11	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	12	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	13	
1    2	<input type="checkbox"/> <input type="checkbox"/>	1    2		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>	14	

\*\*CODES FOR Q.9  
GRADE/YEAR

00 = NO GRADE COMPLETED  
 11 = ELEMENTARY GRADE 1  
 12 = ELEMENTARY GRADE 2  
 13 = ELEMENTARY GRADE 3  
 14 = ELEMENTARY GRADE 4  
 15 = ELEMENTARY GRADE 5  
 16 = ELEMENTARY GRADE 6  
 17 = ELEMENTARY GRADE 7

21 = HIGH SCHOOL YEAR 1  
 22 = HIGH SCHOOL YEAR 2  
 23 = HIGH SCHOOL YEAR 3  
 24 = HIGH SCHOOL YEAR 4  
 25 = HIGH SCHOOL GRADUATE  
 31 = POSTSECONDARY YEAR 1  
 32 = POSTSECONDARY YEAR 2 OR MORE  
 41 = COLLEGE YEAR 1  
 42 = COLLEGE YEAR 2  
 43 = COLLEGE YEAR 3  
 44 = COLLEGE YEAR 4

45 = COLLEGE YEAR 5  
 46 = COLLEGE YEAR 6 OR HIGHER  
 47 = COLLEGE GRADUATE

51 = POST-BACCALAUREATE  
 98 = DON'T KNOW

\*\*\*CODES FOR QS. 11 AND 12  
RESIDENCE

96 = SAME PROVINCE  
 97 = FOREIGN COUNTRY  
 98 = DON'T KNOW  
 SPECIFY IF ANOTHER PROVINCE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
14	What is the main source of drinking water for members of your household?	COMMUNITY WATER SYSTEM PIPED INTO DWELLING ..... 11 YARD/PLOT ..... 12 → 16 PUBLIC TAP ..... 13  POINT SOURCE PROTECTED WELL ..... 21 UNPROTECTED (OPEN DUG WELL) ..... 22 DEVELOPED SPRING ..... 31 UNDEVELOPED SPRING ..... 32 RIVER/STREAM ..... 33 POND/LAKE ..... 34 DAM ..... 35 RAINWATER ..... 41 TANKER TRUCK/PEDDLER ..... 51 BOTTLED WATER ..... 61 → 16 OTHER, SPECIFY ..... 96	
15	How long does it take you to go there, get water, and come back?	MINUTES ..... <input type="text"/> <input type="text"/> <input type="text"/> ON PREMISES ..... 996	
16	How do you treat your drinking water?  PROBE: Anything else?  CIRCLE ALL RESPONSES.	BOILING ..... A CHLORINATION ..... B FILTERING EQUIPMENT ..... C OTHER, SPECIFY ..... X NONE ..... Y	
17	What kind of toilet facility does your household use?	FLUSH TOILET OWN TOILET ..... 11 SHARED FLUSH TOILET ..... 12 PIT TOILET/LATRINE CLOSED PIT ..... 21 OPEN PIT ..... 22 DROP/OVERHANG ..... 31 NO FACILITY/FIELD ..... 41 OTHER, SPECIFY ..... 96	
18	Does your household have: Electricity? A radio/radio cassette? A television? A telephone/cellular phone? A refrigerator/freezer?	YES      NO ELECTRICITY ..... 1      2 RADIO/RADIO CASSETTE ..... 1      2 TELEVISION ..... 1      2 TELEPHONE/CELL PHONE ..... 1      2 REFRIGERATOR/FREEZER ..... 1      2	
19	How many rooms are used for sleeping by your household?	ROOMS..... <input type="text"/> <input type="text"/>	
20	MAIN MATERIAL OF THE FLOOR.  RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND ..... 11 RUDIMENTARY FLOOR WOOD PLANKS ..... 21 PALM/BAMBOO ..... 22 FINISHED FLOOR PARQUET OR POLISHED WOOD ..... 31 VINYL OR ASPHALT STRIPS ..... 32 CERAMIC TILES ..... 33 CEMENT ..... 34 MARBLE ..... 35 OTHER, SPECIFY ..... 96	
21	Does any member of your household own: A bicycle? A motorcycle? A car/jeep/van? A motorized banca/boat? A tractor?	YES      NO BICYCLE ..... 1      2 MOTORCYCLE ..... 1      2 CAR/JEEP/VAN ..... 1      2 BOAT ..... 1      2 TRACTOR ..... 1      2	
22	What type of salt is usually used for cooking in your household?	PACKED IODIZED ..... 11 NOT IODIZED ..... 12 NOT PACKED ROCK/COARSE ..... 21 REFINED ..... 22 OTHER, SPECIFY ..... 96	
23	May I see a sample of the salt used to cook the viand eaten by members of your household last night?  TEST THE SALT AND WRITE THE RESULT	IODINE READING (PPM) <input type="text"/> <input type="text"/> NOT TESTED/NOT SEEN ..... 98	

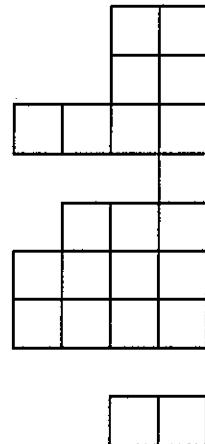
Republic of the Philippines  
 NATIONAL STATISTICS OFFICE  
 1998 NATIONAL DEMOGRAPHIC AND HEALTH SURVEY  
 INDIVIDUAL QUESTIONNAIRE

Set \_\_\_\_ of \_\_\_\_ sets

Confidentiality: This survey is authorized by Commonwealth Act, No. 591. All information is strictly confidential.

IDENTIFICATION

PROVINCE \_\_\_\_\_  
 CITY /MUNICIPALITY \_\_\_\_\_  
 BARANGAY \_\_\_\_\_  
 URBAN/RURAL (URBAN=1, RURAL=2).....  
 NDS SAMPLE NUMBER.....  
 HOUSEHOLD CONTROL NUMBER.....  
 NDHS HOUSEHOLD SEQUENTIAL NUMBER.....  
 ADDRESS \_\_\_\_\_  
 NAME AND LINE NUMBER OF ELIGIBLE WOMAN \_\_\_\_\_



INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY
INTERVIEWER'S NAME	_____	_____	_____	MONTH
RESULT*	_____	_____	_____	YEAR 1 9 9 8
NEXT VISIT: DATE	_____	_____	_____	INT. CODE
TIME	_____	_____	_____	RESULT*
TOTAL NO. OF VISITS				<input type="checkbox"/>

\*RESULT CODES :

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

LANGUAGE OF QUESTIONNAIRE\*\*  7

LANGUAGE OF INTERVIEW\*\*

LOCAL LANGUAGE OF RESPONDENT\*\*

TRANSLATOR USED

YES ... 1

NO ... 2

\*\*LANGUAGE CODES

- |           |           |
|-----------|-----------|
| 1 TAGALOG | 3 ILOCANO |
| 2 CEBUANO | 4 BICOL   |

- |              |
|--------------|
| 5 HILIGAYNON |
| 6 WARAY      |

- |           |
|-----------|
| 7 ENGLISH |
| 8 OTHER   |

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		

**AGE - BIRTH DATE CONSISTENCY CHART**

Current Age	Year of Birth	
	Has not had birthday in 1998	Has already had birthday in 1998
	Don't Know	
0	1997	--
1	1996	1997
2	1995	1996
3	1994	1995
4	1993	1994
5	1992	1993
6	1991	1992
7	1990	1991
8	1989	1990
9	1988	1989
10	1987	1988
11	1986	1987
12	1985	1986
13	1984	1985
14	1983	1984
15	1982	1983
16	1981	1982
17	1980	1981
18	1979	1980
19	1978	1979
20	1977	1978
21	1976	1977
22	1975	1976
23	1974	1975
24	1973	1974
25	1972	1973
26	1971	1972
27	1970	1971
28	1969	1970
29	1968	1969

Current Age	Year of Birth	
	Has not had birthday in 1998	Has already had birthday in 1998
	Don't Know	
30	1967	1968
31	1966	1967
32	1965	1966
33	1964	1965
34	1963	1964
35	1962	1963
36	1961	1962
37	1960	1961
38	1959	1960
39	1958	1959
40	1957	1958
41	1956	1957
42	1955	1956
43	1954	1955
44	1953	1954
45	1952	1953
46	1951	1952
47	1950	1951
48	1949	1950
49	1948	1949
50	1947	1948
51	1946	1947
52	1945	1946
53	1944	1945
54	1943	1944
55	1942	1943
56	1941	1942
57	1940	1941
58	1939	1940
59	1938	1939

**SECTION 1. RESPONDENT'S BACKGROUND**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP				
101	RECORD THE TIME STARTED.	HOUR.....  MINUTES.....	<table border="1" style="display: inline-table;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				
102	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?	NUMBER OF YEARS.....	<table border="1" style="display: inline-table;"><tr><td></td><td></td></tr></table>				
		ALWAYS.....	95				
		VISITOR.....	96				
103	Just before you moved here, did you live in a large city, small city, town/poblacion or barrio/rural area?	LARGE CITY..... SMALL CITY..... TOWN/POBLACION..... BARRIO/RURAL AREA.....	1 2 3 4				
104	In what month and year were you born?	MONTH.....  DON'T KNOW MONTH.....	<table border="1" style="display: inline-table;"><tr><td></td><td></td></tr></table> 98				
		YEAR.....	<table border="1" style="display: inline-table;"><tr><td></td><td></td><td></td><td></td></tr></table>				
		DON'T KNOW YEAR.....	9998				
105	How old were you at your last birthday?  COMPARE AND CORRECT 104 AND/OR 105 IF INCONSISTENT.	AGE IN COMPLETED YEARS	<table border="1" style="display: inline-table;"><tr><td></td><td></td></tr></table>				
106	Have you ever attended school?	YES..... NO.....	1 2 → 112				
107	What is the highest grade/year you completed?	NO GRADE COMPLETED.....  ELEMENTARY GRADE 1..... ELEMENTARY GRADE 2..... ELEMENTARY GRADE 3..... ELEMENTARY GRADE 4..... ELEMENTARY GRADE 5..... ELEMENTARY GRADE 6..... ELEMENTARY GRADE 7.....  HIGH SCHOOL YEAR 1..... HIGH SCHOOL YEAR 2..... HIGH SCHOOL YEAR 3..... HIGH SCHOOL YEAR 4..... HIGH SCHOOL GRADUATE.....  POSTSECONDARY YEAR 1..... POSTSECONDARY YEAR 2..... OR MORE.....  COLLEGE YEAR 1..... COLLEGE YEAR 2..... COLLEGE YEAR 3..... COLLEGE YEAR 4..... COLLEGE YEAR 5..... COLLEGE YEAR 6..... OR HIGHER..... COLLEGE GRADUATE.....  POST-BACCALAUREATE.....  DON'T KNOW.....	00 11 12 13 14 15 16 17 21 22 23 24 25 31 32 41 42 43 44 45 46 47 51 98				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	CHECK 105: AGE 24 OR BELOW <input type="checkbox"/> ↓ AGE 25 OR ABOVE <input type="checkbox"/>		→ 111
109	Are you currently attending school?	YES ..... 1 → 111 NO ..... 2	
110	What was the main reason you stopped attending school?	GOT PREGNANT ..... 01 GOT MARRIED ..... 02 TOOK CARE YOUNGER CHILDREN ..... 03 FAMILY NEEDED HELP ON FARM OR IN BUSINESS ..... 04 COULD NOT PAY SCHOOL ..... 05 NEEDED TO EARN MONEY ..... 06 GRADUATED/HAD ENOUGH SCHOOLING ..... 07 DID NOT PASS ENTRANCE EXAMS ..... 08 DID NOT LIKE SCHOOL ..... 09 SCHOOL NOT ACCESSIBLE/ TOO FAR ..... 10  OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98	
111	CHECK 107: ELEMENTARY GRADE 7 OR LOWER <input type="checkbox"/> ↓ HIGH SCHOOL YEAR 1 OR HIGHER <input type="checkbox"/>		→ 113
112	Can you read and understand a letter or newspaper easily, with difficulty, or not at all?	EASILY ..... 1 WITH DIFFICULTY ..... 2 NOT AT ALL ..... 3 → 114	
113	Do you usually read a newspaper or magazine at least once a week?	YES ..... 1 NO ..... 2	
114	Do you usually listen to a radio everyday?	YES ..... 1 NO ..... 2	
115	Do you usually watch television at least once a week?	YES ..... 1 NO ..... 2	
116	What is your religion?	ROMAN CATHOLIC ..... 1 PROTESTANT ..... 2 IGLESIA NI KRISTO ..... 3 AGLIPAY ..... 4 ISLAM ..... 5 OTHER ..... 6 (SPECIFY) NONE ..... 7	
117	How do you classify yourself? Are you a Tagalog, Cebuano, Ilocano, Ilonggo, Bicolano, Waray, Kapampangan, or something else?	TAGALOG ..... 1 CEBUANO ..... 2 ILOCANO ..... 3 ILONGGO ..... 4 BICOLANO ..... 5 WARAY ..... 6 KAPAMPANGAN ..... 7 OTHER ..... 8 (SPECIFY)	

**SECTION 2. REPRODUCTION**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
201	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 → 206									
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES ..... 1 NO ..... 2 → 204									
203	How many sons live with you?  And how many daughters live with you?  IF NONE, RECORD "00".	SONS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES ..... 1 NO ..... 2 → 206									
205	How many sons are alive but do not live with you?  And how many daughters are alive but do not live with you?  IF NONE, RECORD "00".	SONS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAUGHTERS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
206	Have you ever given birth to a boy or girl who was born alive but later died?  IF NO, PROBE: Any baby who cried or showed signs of life but survived only a few hours or days?	YES ..... 1 NO ..... 2 → 208									
207	How many boys have died?  And how many girls have died?  IF NONE, RECORD "00".	BOYS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
208	Some pregnancies end in non-live births before full term or as a stillbirth. Have you had any pregnancy that did not result in a live birth?	YES ..... 1 NO ..... 2 → 210									
209	In all, how many such pregnancies have there been?	PREGNANCY LOSS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
210	SUM ANSWERS TO 203, 205, 207 AND 209, AND ENTER TOTAL.  IF NONE, RECORD "00".	TOTAL PREGNANCIES ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>									
211	CHECK 210:  Just to make sure that I have this right: you have had _____ children who are still living (CHECK 203 AND 205) _____ children who have died (CHECK 207) _____ pregnancies that did not result in a live birth (CHECK 209). Is that correct?  YES <input type="checkbox"/> NO <input type="checkbox"/> PROBE AND CORRECT 201-210 AS NECESSARY										
212	CHECK 210:  ONE OR MORE PREGNANCIES <input type="checkbox"/> NO PREGNANCIES <input type="checkbox"/>		→ 236								

213 Now I would like to ask you about all of your pregnancies, whether born alive, born dead, or lost before full term, starting with the first one you had.

RECORD ALL THE PREGNANCIES. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

214 Think back to the time of your (first/next) pregnancy.	215 Was that a single or multiple pregnancy?	216 Was the baby born alive, born dead, or lost before full term?	217 Did that baby cry, move, or breathe when it was born?	218 What name was given to that child?	219 Is (NAME) a boy or a girl?	220 In what month and year was (NAME) born?  PROBE: What is his/her birthday?	221 Is (NAME) still alive?			
01	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		
02	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		
03	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		
04	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		
05	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		
06	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		
07	SINGLE ..1	BORN ALIVE.....1 (SKIP TO 218) ←	YES ..1	(NAME)	BOY ..1	MONTH..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				YES ..1
MULTIPLE ..2	BORN DEAD.....2  LOST BEFORE FULL TERM ..3 (SKIP TO 225) ←	NO ..2	GIRL ..2	YEAR.. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td></tr></table>				NO ..2		

IF BORN ALIVE AND STILL LIVING:		IF BORN ALIVE BUT NOW DEAD:		IF BORN DEAD OR LOST BEFORE FULL TERM:																	
222 How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	223 Is (NAME) living with you?  YES...1 NO...2  AGE IN YEARS <table border="1"><tr><td></td><td></td></tr></table> (NEXT PREG.)			224 How old was (NAME) when he/she died?  IF "1 YR.", PROBE: How many months old was (NAME)?  RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OTHERWISE, ENTER YEARS.  YES...1 MONTHS...2 YEARS...3 (SKIP TO NEXT PREG.)	225 In what month and year did this pregnancy end?  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					226 How many months did the pregnancy last?  RECORD IN COMPLETED MONTHS.	227 Did you or a doctor or someone else do anything to end this pregnancy?  YES.....1 NO.....2	228 FROM YEAR OF THIS PREGNANCY SUBTRACT YEAR OF PREVIOUS PREGNANCY. IS THE DIFFERENCE 4 OR MORE YEARS?  <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					229 Were there any other pregnancies between the previous pregnancy mentioned and this pregnancy?  <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>				
01																					
02																					
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214 Think back to the time of your next pregnancy.	215 Was that a single or multiple pregnancy?	216 Was the baby born alive, born dead, or lost before full term?	217 Did that baby cry, move, or breathe when it was born?	218 What name was given to that child?	219 Is (NAME) a boy or a girl?	220 In what month and year was (NAME) born?  PROBE: What is his/her birthday?	221 Is (NAME) still alive?				
08	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓
09	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓
10	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓
11	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓
12	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓
13	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓
14	SINGLE_1 MULTIPLE_2	BORN ALIVE..... 1 (SKIP TO 218) BORN DEAD..... 2 LOST BEFORE FULL TERM... 3 (SKIP TO 225) ←	YES_1 NO_2 225	(NAME)	BOY_1 GIRL_2	MONTH..... YEAR. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>					YES_1 NO_2 224 ↓

IF BORN ALIVE AND STILL LIVING:		IF BORN ALIVE BUT NOW DEAD:	IF BORN DEAD OR LOST BEFORE FULL TERM:															
222 How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	223 Is (NAME) living with you?  IF "1 YR.", PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OTHERWISE, ENTER YEARS.  AGE IN YEARS <table border="1"><tr><td></td><td></td></tr></table>			224 How old was (NAME) when he/she died?  IF "1 YR.", PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OTHERWISE, ENTER YEARS.  YES...1 DAYS.....1 NO....2 MONTHS....2 (GO TO 228) YEARS....3 (SKIP TO 228)  AGE IN YEARS <table border="1"><tr><td></td><td></td></tr></table>			225 In what month and year did this pregnancy end?  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			226 How many months did the pregnancy last?  RECORD IN COMPLETED MONTHS.  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			227 Did you or a doctor or someone else do anything to end this pregnancy?  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			228 FROM YEAR OF THIS PREGNANCY SUBTRACT YEAR OF PREVIOUS PREGNANCY. IS THE DIFFERENCE 4 OR MORE YEARS?  YES...1 NO....2  (NEXT PREGNANCY)	229 Were there any other pregnancies between the previous pregnancy mentioned and this pregnancy?  YES...1 NO....2  (NEXT PREGNANCY)	
08	YES...1  AGE IN YEARS <table border="1"><tr><td></td><td></td></tr></table>			MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>		
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11	YES...1  AGE IN YEARS <table border="1"><tr><td></td><td></td></tr></table>			MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>		
12	YES...1  AGE IN YEARS <table border="1"><tr><td></td><td></td></tr></table>			MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>			MONTHS  YES...1 NO....2  MONTH..... YEAR <table border="1"><tr><td></td><td></td></tr></table>		
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230	FROM YEAR OF INTERVIEW (1998), SUBTRACT YEAR OF LAST PREGNANCY IS THE DIFFERENCE 4 YEARS OR MORE?	YES .. 1 NO .. 2 → 232
231	Have you had any pregnancies since (YEAR OF LAST PREGNANCY)? IF "YES", PROBE AND CORRECT 203 TO 229.	YES .. 1 NO .. 2
232	COMPARE 210 WITH NUMBER OF PREGNANCIES IN HISTORY ABOVE AND MARK  NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> → PROBE AND RECONCILE  CHECK: FOR EACH PREGNANCY: YEAR IS RECORDED IN 220 OR 225. .... <input type="checkbox"/> FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED IN 222. .... <input type="checkbox"/> FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED IN 224. .... <input type="checkbox"/> FOR EACH PREGNANCY LOSS: DURATION IS RECORDED IN 226. .... <input type="checkbox"/> FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS IN 224. .... <input type="checkbox"/>	
233	CHECK 220 AND ENTER THE NUMBER OF BIRTHS SINCE JANUARY 1993. IF NONE, RECORD "0". <input type="checkbox"/>	
233A	CHECK 233: BIRTHS = 0? YES <input type="checkbox"/> NO <input type="checkbox"/> (SKIP TO 235) ↓	
234	CHECK 220: FOR EACH BIRTH SINCE JANUARY 1993 ENTER "B" IN THE MONTH OF BIRTH IN COLUMN 1 OF THE CALENDAR AND "P" IN EACH OF THE 8 PRECEDING MONTHS. WRITE NAME TO THE LEFT OF THE "B" CODE.	
235	CHECK 225 AND 226: FOR EACH NON-LIVE BIRTH SINCE 1993, ENTER "T" IN THE MONTH OF PREGNANCY TERMINATION IN COLUMN 1 OF THE CALENDAR AND "P" IN EACH PRECEDING MONTH OF PREGNANCY.	
236	Are you pregnant?	YES ..... 1 NO ..... 2 UNSURE ..... 8 → 239
237	How many months pregnant are you?  RECORD NUMBER OF COMPLETED MONTHS. ENTER "Ps" IN COLUMN 1 OF CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR EACH COMPLETED MONTH OF PREGNANCY.	MONTHS ..... <input type="checkbox"/> <input type="checkbox"/>
238	At the time you became pregnant, did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to become pregnant at all?	THEN ..... 1 LATER ..... 2 NOT AT ALL ..... 3
239	When did your last menstrual period start?  _____ (DATE, IF GIVEN)	DAYS AGO ..... 1 <input type="checkbox"/> WEEKS AGO ..... 2 <input type="checkbox"/> MONTHS AGO ..... 3 <input type="checkbox"/> YEARS AGO ..... 4 <input type="checkbox"/> IN MENOPAUSE ..... 994 BEFORE LAST BIRTH ..... 995 NEVER MENSTRUATED ..... 996
240	Are there certain days during the woman's menstrual cycle when she has a greater chance of becoming pregnant than other days?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8 → 301
241	During which days of the monthly cycle does a woman have the greatest chance of becoming pregnant?	DURING HER PERIOD ..... 1 RIGHT AFTER HER PERIOD HAS ENDED ..... 2 IN THE MIDDLE OF THE CYCLE ..... 3 JUST BEFORE HER PERIOD BEGINS ..... 4 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8

**SECTION 3. CONTRACEPTION**

<p>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.</p> <p>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, ASK 303 AND 304.</p>					
301	Which ways or methods have you heard about?	SPONTANEOUS YES	302 Have you ever heard of (METHOD)? PROBED YES      NO	303 Have you ever used (METHOD)?	304 Do you know where a person could go to get (METHOD)?
01	PILL Women can take a pill every day.	1      2      3	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
02	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	1      2      3	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
03	INJECTIONS Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months.	1      2      3	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
04	CONDOM Men can put a rubber sheath on their penis during sexual intercourse.	1      2      3	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
05	LIGATION/FEMALE STERILIZATION Women can have an operation to avoid having any more children.	1      2      3	Have you ever had an operation to avoid having any more children? YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
06	VASECTOMY/MALE STERILIZATION Men can have an operation to avoid having any more children.	1      2      3	Have you ever had a partner who had an operation to avoid having any more children? YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
07	CALENDAR, RHYTHM, PERIODIC ABSTINENCE Every month that women are sexually active they can avoid having sexual intercourse on the days of the month they are most likely to get pregnant.	1      2      3	YES ..... 1 NO ..... 2	Do you know where a person can obtain advice on how to use this method? YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	
08	MUCUS, BILLINGS, OVULATION Women can monitor cervical mucus to determine the days of the month they are most likely to get pregnant.	1      2      3	YES ..... 1 NO ..... 2	Do you know where a person can obtain advice on how to use this method? YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3	

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, ASK 303 AND 304.

301	Which ways or methods have you heard about?	302 Have you ever heard of (METHOD)?			303 Have you ever used (METHOD)?	304 Do you know where a person can obtain advice on how to use this method?
		SPONTANEOUS YES	PROBED YES	NO		
09	BASAL BODY TEMPERATURE Women can monitor the body temperature to determine the days of the month they are most likely to get pregnant.	1	2	3 ↓	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3
10	SYMPTOTHERMAL Women can monitor both cervical mucus and basal body temperature to determine the days of the month they are most likely to get pregnant.	1	2	3 ↓	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3
11	LACTATIONAL AMENORRHEA METHOD (LAM) Method used by women with less than 6 month old baby, whose period has not returned and are breastfeeding the baby day and night without supplementation to avoid pregnancy.	1	2	3 ↓	YES ..... 1 NO ..... 2	YES, SAME BARANGAY ..... 1 YES, ANOTHER BARANGAY ..... 2 NO ..... 3
12	BREASTFEEDING Women breastfeed the child to avoid pregnancy.	1	2	3 ↓	YES ..... 1 NO ..... 2	
13	WITHDRAWAL Men can be careful and pull out before climax	1	2	3 ↓	YES ..... 1 NO ..... 2	
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?  _____ (SPECIFY)  _____ (SPECIFY)	1	2	3 ↓	YES ..... 1 NO ..... 2  YES ..... 1 NO ..... 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
305	CHECK 303: NOT A SINGLE "YES" <input type="checkbox"/> (NEVER USED) ↓  AT LEAST ONE "YES" <input type="checkbox"/> (EVER USED)	309	
306	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES ..... 1 NO ..... 2	308
307	ENTER "0" IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH.		344
308	What have you used or done?  CORRECT 303 TO 305 (AND 302 IF NECESSARY).		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
309	<p>Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant.</p> <p>What was the first method you ever used?</p> <p>IF WOMAN MENTIONS LAM, PROBE IF AT THE TIME SHE WAS USING LAM SHE HAD A BABY LESS THAN 6 MONTHS OLD, HER PERIOD DID NOT RETURN THEN, AND SHE WAS BREASTFEEDING THE BABY DAY AND NIGHT WITHOUT SUPPLEMENTATION TO AVOID PREGNANCY. IF THE RESPONDENT DOES NOT QUALIFY FOR LAM, ENCIRCLE CODE "12" - BREASTFEEDING.</p>	PILL.....01 IUD.....02 INJECTIONS.....03 CONDOM.....04 FEMALE STERILIZATION.....05 MALE STERILIZATION.....06 CALENDAR, RHYTHM, PERIODIC ABSTINENCE.....07 MUCUS, BILLINGS, OVULATION.....08 BASAL BODY TEMPERATURE.....09 SYMPOTHERMAL.....10 LACTATIONAL AMENORRHEA METHOD (LAM).....11 BREASTFEEDING.....12 WITHDRAWAL.....13 OTHER .....96 (SPECIFY)	
310	<p>How many living children did you have at that time, if any? IF NONE, RECORD "00".</p>	NUMBER OF CHILDREN..... <input type="text"/> <input type="text"/>	
311	In what month and year did you first start using a method of family planning?	MONTH..... <input type="text"/> <input type="text"/> DON'T KNOW.....98 YEAR..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> → 313 DONT KNOW.....9998	
312	How old were you when you first started using a method of family planning?	AGE..... <input type="text"/> <input type="text"/>	
313	CHECK 303:  WOMAN NOT STERILIZED <input type="checkbox"/> WOMAN STERILIZED <input type="checkbox"/>	→ 316A	
314	CHECK 236:  NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/>	→ 331	
315	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2 → 331	
316	<p>Which method are you currently using?</p> <ul style="list-style-type: none"> <li>• CIRCLE ONLY ONE CODE.</li> <li>• IF FEMALE STERILIZATION IS USED IN COMBINATION WITH ANY OTHER METHOD, CIRCLE "05" FOR FEMALE STERILIZATION.</li> <li>• IF USING ANY METHOD WHICH REQUIRES SUPPLY/SERVICE ("01" TO "06") AND ANY METHOD WHICH DOES NOT REQUIRE SUPPLY/SERVICE ("07" TO "13" AND "96"), CIRCLE THE CODE FOR THE METHOD WHICH REQUIRE SUPPLY/SERVICE ("01" TO "06").</li> <li>• IF WOMEN IS STERILIZED/USING IUD AND HUSBAND/PARTNER HAD STERILIZATION, CIRCLE THE CODE FOR THE CURRENT METHOD USED BY THE WOMAN.</li> <li>• IF THE ABOVE CONDITIONS ARE NOT SATISFIED, CIRCLE THE CODE FOR THE METHOD USED OFTEN.</li> </ul>	PILL.....01 IUD.....02 INJECTIONS.....03 → 323 CONDOM.....04 FEMALE STERILIZATION.....05 MALE STERILIZATION.....06 → 325 CALENDAR, RHYTHM, PERIODIC ABSTINENCE.....07 MUCUS, BILLINGS, OVULATION.....08 BASAL BODY TEMPERATURE.....09 SYMPOTHERMAL.....10 → 330 LACTATIONAL AMENORRHEA METHOD (LAM).....11 BREASTFEEDING.....12 WITHDRAWAL.....13 OTHER .....96 (SPECIFY)	
316A	CIRCLE "05" FOR FEMALE STERILIZATION.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
317	At the time you first started using the pill, did you consult a doctor, nurse or midwife?	YES.....1 NO.....2	
318	At the time you last got the pill, did you consult a doctor, nurse or midwife?	YES.....1 NO.....2	
319	May I see the package of pills you are now using? RECORD NAME OF BRAND IF PACKAGE IS SEEN.	PACKAGE SEEN.....1 BRAND NAME <input type="text"/> <input type="text"/> PACKAGE NOT SEEN.....2	321
320	What is the brand name of the pills you are using now? RECORD NAME OF BRAND.	BRAND NAME <input type="text"/> <input type="text"/> DON'T KNOW.....98	
321	How much (in cash) does one packet (cycle) of pills cost you?	PESO..... <input type="text"/> <input type="text"/> <input type="text"/> FREE.....996 DON'T KNOW.....998	
322	How much would you be willing to pay for the packet of pills?  P 10? P 25? P 50? P 75? P 100? P 150? P 200? P 300? More than P 300?  IF YES, CONTINUE WITH THE NEXT AMOUNT. IF "NO", SKIP TO 330.	YES    NO P 10.....1    2 P 25.....1    2 P 50.....1    2 P 75.....1    2 P 100.....1    2 P 150.....1    2 P 200.....1    2 P 300.....1    2 More than P 300.....1    2	330
323	On your last visit, how much (in cash) did you actually pay for (METHOD in 316)?  PROBE FOR COST PER IUD DEVICE PLUS INSERTION, PER INJECTION, PER PACKET OF CONDOM, AS APPROPRIATE.	PESO..... <input type="text"/> <input type="text"/> <input type="text"/> FREE.....996 DON'T KNOW.....998	
324	How much would you be willing to pay for (METHOD in 316), (including all costs):  P 10? P 20? P 30? P 50? P 100? P 250? P 500? P 750? P 1000? More than P 1000?  IF "YES", CONTINUE WITH THE NEXT AMOUNT. IF "NO", SKIP TO 330.	YES    NO P 10?.....1    2 P 20?.....1    2 P 30?.....1    2 P 50?.....1    2 P 100?.....1    2 P 250?.....1    2 P 500?.....1    2 P 750?.....1    2 P 1000?.....1    2 More than P 1000?.....1    2	330
325	Do you regret that you (your husband/partner) had the operation not to have any (more) children?	YES .....1 NO .....2	327
326	Why do you regret the operation?	RESPONDENT WANTS ANOTHER CHILD.....1 HUSBAND/PARTNER WANTS ANOTHER CHILD.....2 SIDE EFFECTS.....3 CHILD DIED.....4 OTHER.....6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
327	In what month and year was the sterilization performed?	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
328	How much (in cash) did the sterilization operation cost you?	PESO ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FREE ..... 99996 DON'T KNOW ..... 99998	
329	<p>CHECK 327:</p> <p>STERILIZED BEFORE JANUARY 1993 <input type="checkbox"/></p> <p>ENTER CODE FOR STERILIZATION IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO JANUARY 1993.</p> <p>THEN SKIP TO → 332</p>	<p>STERILIZED IN/ AFTER JAN. 1993 <input type="checkbox"/></p> <p>ENTER CODE FOR STERILIZATION IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE OF THE OPERATION</p> <p>THEN SKIP TO → 331</p>	
330	<p>ENTER METHOD CODE FROM 316 IN CURRENT MONTH IN COLUMN 1 OF CALENDAR. THEN DETERMINE WHEN SHE STARTED USING METHOD THIS TIME. ENTER METHOD CODE IN EACH MONTH OF USE.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ul style="list-style-type: none"> <li>• When did you start using this method continuously?</li> <li>• How long have you been using this method continuously?</li> </ul>		
331	<p>I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years.</p> <p>USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NON-USE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 1993.</p> <p>USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.</p> <p>IN COLUMN 1, ENTER CODE IN EACH MONTH OF METHOD USE OR "0" FOR NON-USE.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <p>COLUMN 1:</p> <ul style="list-style-type: none"> <li>• When was the last time you used a method? Which method was that?</li> <li>• When did you start using that method? How long after the birth of (NAME)?</li> <li>• How long did you use the method then?</li> </ul> <p>IN COLUMN 2, ENTER CODES FOR REASON FOR DISCONTINUATION IN THE LAST MONTH THE METHOD WAS USED. NUMBER OF CODES IN COLUMN 2 MUST BE THE SAME AS THE NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.</p> <p>ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <p>COLUMN 2:</p> <ul style="list-style-type: none"> <li>• Why did you stop using the (METHOD)?</li> <li>• Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?</li> </ul> <p>IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK:</p> <ul style="list-style-type: none"> <li>• How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER "0" IN EACH SUCH MONTH IN COLUMN 1.</li> </ul>		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
332	CHECK 316:  CIRCLE METHOD CODE:	NO ENTRY ..... 00 PILL ..... 01 IUD ..... 02 INJECTIONS ..... 03 CONDOM ..... 04 FEMALE STERILIZATION ..... 05 MALE STERILIZATION ..... 06 CALENDAR, RHYTHM, PERIODIC ABSTINENCE ..... 07 → 346 MUCUS, BILLINGS, OVULATION ..... 08 BASAL BODY TEMPERATURE ..... 09 SYMPTOTHERMAL ..... 10 LACTATIONAL AMENORRHEA METHOD (LAM) ..... 11 BREASTFEEDING ..... 12 WITHDRAWAL ..... 13 → 346 OTHER METHOD ..... 96	→ 344								
333	Where did you obtain/learn about (METHOD) the last time?  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 RURAL/URBAN HEALTH CENTER ..... 12 BARANGAY HEALTH STATION ..... 13 BARANGAY SUPPLY/SERVICE POINT OFFICER/BHW ..... 14 OTHER PUBLIC ..... 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 PRIVATE DOCTOR ..... 22 PRIVATE NURSE/MIDWIFE ..... 23 PHARMACY ..... 24 STORE ..... 25 NGO ..... 27 INDUSTRY-BASED CLINIC ..... 28 OTHER PRIVATE MEDICAL ..... 26 (SPECIFY) OTHER SOURCE PUERICULTURE CENTER ..... 31 CHURCH ..... 32 FRIEND/RELATIVE ..... 33 OTHER ..... 36 (SPECIFY) DON'T KNOW ..... 98									
334	How long did it take to travel from your home to (NAME OF SOURCE)?  IF LESS THAN 2 HOURS, RECORD IN MINUTES. ELSE, RECORD IN HOURS.	MINUTES ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> HOURS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>0</td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW ..... 9998					0				
0											
335	Is it easy or difficult to get to (NAME OF SOURCE)?	EASY ..... 1 DIFFICULT ..... 2 DON'T KNOW ..... 8									
336	Were you satisfied with the service at (NAME OF SOURCE)?	YES ..... 1 → 338 NO ..... 2 DON'T KNOW ..... 8 → 338									
337	What is the reason you were not satisfied with the service at (NAME OF SOURCE)?  PROBE: Any other reason?  CIRCLE ALL RESPONSES.	COST TOO MUCH ..... A NOT EASILY ACCESSIBLE ..... B TIME OPEN NOT CONVENIENT ..... C DAYS OPEN NOT CONVENIENT ..... D STAFF NOT PLEASANT/FRIENDLY ..... E METHOD NOT AVAILABLE ..... F SERVICE TAKES TOO MUCH TIME ..... G OTHER ..... X (SPECIFY)									

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
338	Who referred you to (NAME OF SOURCE)?	<p>PUBLIC SECTOR            BARANGAY SERVICE POINT            OFFICER ..... 11            BARANGAY HEALTH WORKER ..... 12            BARANGAY NUTRITION SCHOLAR ..... 13            OTHER PUBLIC ..... 16            (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR            COMMUNITY HEALTH WORKER ..... 21            VOLUNTARY HEALTH WORKER ..... 22            NGO CLINIC OUTREACH WORKER ..... 23            OTHER PRIVATE            MEDICAL ..... 26            (SPECIFY)</p> <p>OTHER SOURCE            FRIEND/RELATIVE ..... 31            OTHER ..... 36            (SPECIFY)</p> <p>NO ONE ..... 41            DON'T KNOW ..... 98</p>	
339	Are you having any problem with using (NAME OF METHOD)?	<p>YES ..... 1            NO ..... 2</p>	→ 341
340	What is your main problem with using (NAME OF METHOD)?	<p>HUSBAND DISAPPROVES ..... 1            SIDE EFFECTS ..... 2            HEALTH CONCERNS ..... 3            DIFFICULT TO OBTAIN ..... 4            COSTS TOO MUCH ..... 5            INCONVENIENT TO USE ..... 7            OTHER ..... 6            (SPECIFY)</p>	
341	CHECK 316:	<p>FEMALE/MALE STERILIZATION <input type="checkbox"/> → 342A</p> <p>OTHER METHODS <input type="checkbox"/> → 342</p>	
342	Do you know another place where you could have obtained/learned about (METHOD) the last time?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 343
342A	At the time of the sterilization operation, did you know another place where you could have received the operation?	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 348

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
343	<p>People select the place where they get family planning services for various reasons.</p> <p>What was the main reason you went to (NAME OF PLACE IN 333) instead of some other place you know about?</p> <p>RECORD RESPONSE AND CIRCLE CODE.</p> <hr/>	<p>ACCESS-RELATED REASONS</p> <p>CLOSER TO HOME ..... 11 CLOSER TO MARKET/WORK ..... 12 AVAILABILITY OF TRANSPORT ..... 13</p> <p>SERVICE-RELATED REASONS</p> <p>STAFF MORE COMPETENT/ FRIENDLY ..... 21 CLEANER FACILITY ..... 22 OFFERS MORE PRIVACY ..... 23 SHORTER WAITING TIME ..... 24 LONGER HOURS OF SERVICE ..... 25 USE OTHER SERVICES AT THE FACILITY ..... 26 LOWER COST/CHEAPER ..... 31 WANTED ANONYMITY ..... 41 OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98</p>	
344	<p>CHECK 236:</p> <p>NOT PREGNANT OR UNSURE <input type="checkbox"/></p> <p>PREGNANT <input type="checkbox"/></p> <p style="text-align: center;">↓</p>		348
345	<p>What is the main reason you are not using a method of contraception to avoid pregnancy?</p> <p>RECORD RESPONSE AND CIRCLE CODE.</p> <hr/>	<p>NOT MARRIED ..... 11</p> <p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX ..... 21 INFREQUENT SEX/ HUSBAND AWAY ..... 22 MENOPAUSAL/HYSTERECTOMY ..... 23 SUBFECUND/INFECUND ..... 24 POSTPARTUM/BREASTFEEDING ..... 25 WANTS (MORE) CHILDREN ..... 26 MIGHT BE PREGNANT ..... 27</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED ..... 31 HUSBAND OPPOSED ..... 32 OTHERS OPPOSED ..... 33 RELIGIOUS PROHIBITION ..... 34 FATALISTIC ..... 35</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD ..... 41 KNOWS NO SOURCE ..... 42</p> <p>METHOD-RELATED REASONS</p> <p>HEALTH CONCERNs ..... 51 FEAR OF SIDE EFFECTS ..... 52 LACK OF ACCESS/TOO FAR ..... 53 COST TOO MUCH ..... 54 INCONVENIENT TO USE ..... 55 INTERFERES WITH BODY'S NATURAL PROCESSES ..... 56</p> <p>OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98</p>	348
346	Do you know of a place where you can obtain a method of family planning?	YES ..... 1 NO ..... 2	348

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
347	Where is that?  PROBE: Anywhere else?  RECORD ALL MENTIONED.	<p>PUBLIC SECTOR      GOVERNMENT HOSPITAL.....A      RURAL/URBAN HEALTH CENTER.....B      BARANGAY HEALTH STATION.....C      BARANGAY SUPPLY/SERVICE POINT OFFICER/BHW .....D      OTHER PUBLIC .....E      (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR      PRIVATE HOSPITAL/CLINIC .....F      PRIVATE DOCTOR .....G      PRIVATE NURSE/MIDWIFE .....H      PHARMACY .....I      STORE .....J      NGO .....K      INDUSTRY-BASED CLINIC .....L      OTHER PRIVATE MEDICAL .....M      (SPECIFY)</p> <p>OTHER SOURCE      PUERICULTURE CENTER .....N      CHURCH .....O      FRIEND/RELATIVE .....P      OTHER .....X      (SPECIFY)      DONT KNOW .....Z</p>	
348	Were you visited by a family planning program worker in the last 12 months?	YES .....1 NO .....2	
349	Have you visited a health facility for any reason in the last 12 months?	YES .....1 NO .....2	→ 351
350	Did any staff member at the health facility speak to you about family planning methods?	YES .....1 NO .....2	
351	Have you had a pap smear within the past 5 years?	YES .....1 NO .....2 DON'T KNOW PAP SMEAR .....8	
352	Have you examined your breast for any sign of a mass within the last month?	YES .....1 NO .....2	

REMARKS:

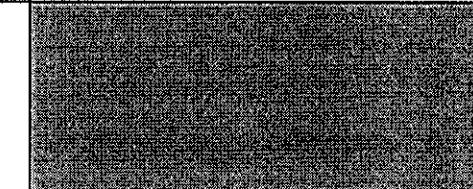
**SECTION 4A. PREGNANCY AND BREASTFEEDING**

401	CHECK 233: ONE OR MORE BIRTHS SINCE JAN. 1993	<input type="checkbox"/>	NO BIRTHS SINCE JAN. 1993	<input type="checkbox"/>	SKIP TO 479
402	ENTER THE NAME, LINE NUMBER, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1993 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE ADDITIONAL QUESTIONNAIRE).				
Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about one child at a time.)					
403	LINE NUMBER FROM 214	LAST BIRTH LINE NUMBER.....	<input type="checkbox"/> <input type="checkbox"/>	NEXT-TO-LAST BIRTH LINE NUMBER.....	<input type="checkbox"/> <input type="checkbox"/>
404	FROM 218 AND 221	NAME _____ ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>	NAME _____ ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>
405	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you want no (no more) children at all?	THEN.....1 LATER.....2 NO/NO MORE.....3 (SKIP TO 407) <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>	THEN.....1 LATER.....2 NO/NO MORE.....3 (SKIP TO 407) <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>
406	How much longer would you like to have waited?	MONTHS.....1 YEARS.....2 DON'T KNOW.....998	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	MONTHS.....1 YEARS.....2 DON'T KNOW.....998	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
407	When you were pregnant with (NAME), did you see anyone for prenatal care for this pregnancy?  IF YES: Whom did you see? Anyone else?  PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR.....A NURSE.....B MIDWIFE.....C HILOT.....D OTHER.....X (SPECIFY) NO ONE.....Y (SKIP TO 413) <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>	HEALTH PROFESSIONAL DOCTOR.....A NURSE.....B MIDWIFE.....C HILOT.....D OTHER.....X (SPECIFY) NO ONE.....Y (SKIP TO 413) <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>
408	Whom did you see first for prenatal care?	HEALTH PROFESSIONAL DOCTOR.....1 NURSE.....2 MIDWIFE.....3 HILOT.....4 OTHER.....6 (SPECIFY)	 <input type="checkbox"/> <input type="checkbox"/>	HEALTH PROFESSIONAL DOCTOR.....1 NURSE.....2 MIDWIFE.....3 HILOT.....4 OTHER.....6 (SPECIFY)	 <input type="checkbox"/> <input type="checkbox"/>
409	How many months pregnant were you when you first received prenatal care?	MONTHS..... DON'T KNOW.....98	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	MONTHS..... DON'T KNOW.....98	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
410	How many times did you receive prenatal care during this pregnancy?	NO. OF TIMES..... DON'T KNOW.....98	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	NO. OF TIMES..... DON'T KNOW.....98	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
411	During any of your prenatal visits, were you informed about symptoms or conditions which may occur during pregnancy that may be dangerous to you or to your baby?	YES.....1 NO.....2 DON'T KNOW.....8 (SKIP TO 413) <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>	YES.....1 NO.....2 DON'T KNOW.....8 (SKIP TO 413) <input type="checkbox"/>	 <input type="checkbox"/> <input type="checkbox"/>

		LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
412	What symptoms or conditions can you remember?  PROBE: Anything else?	VAGINAL BLEEDING.....A HEADACHE, DIZZINESS, BLURRED VISION.....B SWOLLEN FACE AND/OR HANDS.....C PALE OR ANEMIC.....D CAN'T REMEMBER.....E OTHER _____ X (SPECIFY)	VAGINAL BLEEDING.....A HEADACHE, DIZZINESS, BLURRED VISION.....B SWOLLEN FACE AND/OR HANDS.....C PALE OR ANEMIC.....D CAN'T REMEMBER.....E OTHER _____ X (SPECIFY)
413	When you were pregnant with (NAME) were you given any of the following:  Iron tablets/capsules? Iodine capsule?  Tetanus toxoid, an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES NO DK  IRON TAB/CAP.....1 2 8 IODINE CAP.....1 2 8  TETANUS TOXOID.....1 2 8 (SKIP TO 415A)	YES NO DK  IRON TAB/CAP.....1 2 8 IODINE CAP.....1 2 8  TETANUS TOXOID.....1 2 8 (SKIP TO 415A)
414	During this pregnancy, how many times did you receive a tetanus toxoid injection?	NO. OF TIMES ..... <input type="checkbox"/>  DON'T KNOW ..... 8	NO. OF TIMES ..... <input type="checkbox"/>  DON'T KNOW ..... 8
415A	Did you receive any tetanus toxoid injections during your previous pregnancies or during the National Immunization Day or Oplan Alis Disease?	YES ..... 1 NO ..... 2  (SKIP TO 416) <input type="checkbox"/> ←  DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 416) <input type="checkbox"/> ←  DON'T KNOW ..... 8
415B	How many times?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
416	Where did you give birth to (NAME)?  PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HOME OWN HOME ..... 11 OTHER HOME ..... 12  PUBLIC SECTOR GOVT. HOSPITAL ..... 21 GOVT. HEALTH CENTER ..... 22 GOVT. HEALTH POST ..... 23 OTHER PUBLIC ..... 26 (SPECIFY)  PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC ..... 31 OTHER PRIVATE MEDICAL ..... 36 (SPECIFY)  OTHER ..... 96 (SPECIFY)	HOME OWN HOME ..... 11 OTHER HOME ..... 12  PUBLIC SECTOR GOVT. HOSPITAL ..... 21 GOVT. HEALTH CENTER ..... 22 GOVT. HEALTH POST ..... 23 OTHER PUBLIC ..... 26 (SPECIFY)  PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC ..... 31 OTHER PRIVATE MEDICAL ..... 36 (SPECIFY)  OTHER ..... 96 (SPECIFY)
417	Who assisted with the delivery of (NAME)?  Anyone else?  PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.	HEALTH PROFESSIONAL DOCTOR ..... A NURSE ..... B MIDWIFE ..... C HILOT ..... D RELATIVE/FRIEND ..... E  OTHER ..... X (SPECIFY)  NO ONE ..... Y	HEALTH PROFESSIONAL DOCTOR ..... A NURSE ..... B MIDWIFE ..... C HILOT ..... D RELATIVE/FRIEND ..... E  OTHER ..... X (SPECIFY)  NO ONE ..... Y

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____																
417A	Around the time of the birth of (NAME), did you have any of the following problems?  Long Labor, that is, your regular contractions last more than 12 hours?  Excessive bleeding that you feared it was life threatening?  A high fever with bad smelling vaginal discharge?  Convulsions not caused by a fever?	YES      NO  LABOR MORE THAN 12 HOURS ..... 1      2  EXCESSIVE BLEEDING ..... 1      2  FEVER WITH BAD SMELLING VAGINAL DISCHARGE ..... 1      2  CONVULSIONS ..... 1      2	YES      NO  LABOR MORE THAN 12 HOURS ..... 1      2  EXCESSIVE BLEEDING ..... 1      2  FEVER WITH BAD SMELLING VAGINAL DISCHARGE ..... 1      2  CONVULSIONS ..... 1      2																
418	When (NAME) was born, was he/she:  very large, larger than average, average, smaller than average, or very small?	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DON'T KNOW ..... 8																
419	Was (NAME) delivered by caesarian section?	YES ..... 1 NO ..... 2  (SKIP TO 420) ←	YES ..... 1 NO ..... 2  (SKIP TO 420) ←																
419A	What was the main reason for having a delivery by caesarian section?	HIGH BLOOD PRESSURE AND SWELLING OF FACE AND HAND W/O CONVULSION (PRE-ECLAMPSIA) ..... 01  CONVULSION, HIGH BLOOD PRESSURE AND SWELLING OF FACE AND HAND (ECLAMPSIA) ..... 02  BABY TOO BIG TO PASS MOTHER'S PELVIC BONE ..... 03  BREECH BIRTH, BABY'S HEAD NOT COMING OUT FIRST ..... 04  BABY MIGHT DIE INSIDE MOTHER'S WOMB (FETAL DISTRESS) ..... 05  UNUSUALLY PROLONGED LABOR (LABOR BEYOND 12 HOURS) ..... 06  EXCESSIVE WATERY VAGINAL DISCHARGE BEFORE THE ONSET OF LABOR ..... 07  EXCESSIVE BLEEDING ..... 08  OTHER ..... 09  (SPECIFY)  DON'T KNOW ..... 98	HIGH BLOOD PRESSURE AND SWELLING OF FACE AND HAND W/O CONVULSION (PRE-ECLAMPSIA) ..... 01  CONVULSION, HIGH BLOOD PRESSURE AND SWELLING OF FACE AND HAND (ECLAMPSIA) ..... 02  BABY TOO BIG TO PASS MOTHER'S PELVIC BONE ..... 03  BREECH BIRTH, BABY'S HEAD NOT COMING OUT FIRST ..... 04  BABY MIGHT DIE INSIDE MOTHER'S WOMB (FETAL DISTRESS) ..... 05  UNUSUALLY PROLONGED LABOR (LABOR BEYOND 12 HOURS) ..... 06  EXCESSIVE WATERY VAGINAL DISCHARGE BEFORE THE ONSET OF LABOR ..... 07  EXCESSIVE BLEEDING ..... 08  OTHER ..... 09  (SPECIFY)  DON'T KNOW ..... 98																
420	Was (NAME) weighed at birth?	YES ..... 1 NO ..... 2  (SKIP TO 422) ←	YES ..... 1 NO ..... 2  (SKIP TO 422) ←																
421	How much did (NAME) weigh?  RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE.	POUNDS      OUNCES  FROM CARD ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>  FROM RECALL ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>  DON'T KNOW ..... 99998									POUNDS      OUNCES  FROM CARD ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>  FROM RECALL ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>  DON'T KNOW ..... 99998								

		LAST BIRTH	NEXT-TO-LAST BIRTH																
		NAME _____	NAME _____																
422	Did you see anyone for a postnatal check-up after the birth of (NAME)?  IF YES: Whom did you see? Anyone else?	HEALTH PROFESSIONAL DOCTOR.....A NURSE.....B MIDWIFE.....C HILOT.....D RELATIVE/FRIEND.....E  OTHER _____ X (SPECIFY) NO ONE.....Y (SKIP TO 425) ←	HEALTH PROFESSIONAL DOCTOR.....A NURSE.....B MIDWIFE.....C HILOT.....D RELATIVE/FRIEND.....E  OTHER _____ X (SPECIFY) NO ONE.....Y (SKIP TO 426) ←																
423	How many days after the birth of (NAME) did you get postnatal care?	DAYS.....1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS.....2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW.....998									DAYS.....1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS.....2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW.....998								
424	Did you receive the following services during your postnatal check-up?  Abdominal examination? Breast examination? Internal examination? Family planning advice? Breastfeeding advice? Baby care advice? Check-up of baby? Any other service?	YES NO DK  ABDOMINAL EXAM.....1 2 8 BREAST EXAM.....1 2 8 INTERNAL EXAM.....1 2 8 FAMILY PLANNING ADVICE.....1 2 8 BREASTFEEDING ADVICE.....1 2 8 BABY CARE ADVICE.....1 2 8 CHECK-UP OF BABY.....1 2 8 OTHER _____ 1 2 8  (SPECIFY)	YES NO DK  ABDOMINAL EXAM.....1 2 8 BREAST EXAM.....1 2 8 INTERNAL EXAM.....1 2 8 FAMILY PLANNING ADVICE.....1 2 8 BREASTFEEDING ADVICE.....1 2 8 BABY CARE ADVICE.....1 2 8 CHECK-UP OF BABY.....1 2 8 OTHER _____ 1 2 8  (SPECIFY)																
425	Has your period returned since the birth of (NAME)?	YES.....1 (SKIP TO 427) ←  NO.....2 (SKIP TO 428) ←																	
426	Did your period return between the birth of (NAME) and your next pregnancy?		YES.....1 NO.....2 (SKIP TO 430) ←																
427	For how many months after the birth of (NAME) did you <u>not</u> have your period?	MONTHS..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW.....98					MONTHS..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW.....98												
428	CHECK 236:  RESPONDENT PREGNANT?	NOT PREG-NANT <input type="checkbox"/> PREG-NANT OR UNSURE <input type="checkbox"/>  (SKIP TO 430)																	
429	Have you resumed sexual relations since the birth of (NAME)?	YES.....1 NO.....2 (SKIP TO 431) ←																	
430	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	MONTHS..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW.....98					MONTHS..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW.....98												
431	Did you ever breastfeed (NAME)?	YES.....1 (SKIP TO 433) ←  NO.....2	YES.....1 (SKIP TO 433) ←  NO.....2																

		LAST BIRTH	NEXT-TO-LAST BIRTH																
432	Why did you not breastfeed (NAME)?	<p>NAME _____</p> <p>MOTHER ILL/WEAK.....1      CHILD ILL/WEAK.....2      CHILD DIED.....3      NIPPLE/BREAST PROBLEM.....4      NOT ENOUGH MILK.....5      MOTHER WORKING.....7      CHILD REFUSED.....8</p> <p>OTHER _____ 6  <small>(SPECIFY) (SKIP TO 443)</small> ←</p>	<p>NAME _____</p> <p>MOTHER ILL/WEAK.....1      CHILD ILL/WEAK.....2      CHILD DIED.....3      NIPPLE/BREAST PROBLEM.....4      NOT ENOUGH MILK.....5      MOTHER WORKING.....7      CHILD REFUSED.....8</p> <p>OTHER _____ 6  <small>(SPECIFY) (SKIP TO 443)</small> ←</p>																
433	How long after birth did you first put (NAME) to the breast?  IF LESS THAN 1 HOUR, RECORD "00" HOURS IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS	<p>IMMEDIATELY.....000</p> <p>HOURS.....1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>DAYS.....2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p>									<p>IMMEDIATELY.....000</p> <p>HOURS.....1 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>DAYS.....2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p>								
434	CHECK 404:  CHILD ALIVE?	<p>ALIVE <table border="1"><tr><td></td></tr><tr><td></td></tr></table> DEAD <table border="1"><tr><td></td></tr><tr><td></td></tr></table></p> <p>↓  <small>(SKIP TO 436)</small> ←</p>																	
435	Are you still breastfeeding (NAME)?	<p>YES.....1  <small>(SKIP TO 438)</small> ←</p> <p>NO.....2</p>																	
436	For how many months did you breastfeed (NAME)?	<p>MONTHS..... <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>DON'T KNOW.....98</p>					<p>MONTHS..... <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p> <p>STILL BREASTFEEDING.....70  <small>(SKIP TO 441)</small> ←</p> <p>DON'T KNOW.....98</p>												
437	Why did you stop breastfeeding (NAME)?	<p>MOTHER ILL/WEAK.....01      CHILD ILL/WEAK.....02      CHILD DIED.....03      NIPPLE/BREAST PROBLEM.....04      NOT ENOUGH MILK.....05      MOTHER WORKING.....06      CHILD REFUSED.....07      WEANING AGE/AGE TO STOP....08      BECAME PREGNANT.....09      STARTED USING      CONTRACEPTION.....10      OTHER.....96  <small>(SPECIFY) (SKIP TO 440)</small> ←</p>	<p>MOTHER ILL/WEAK.....01      CHILD ILL/WEAK.....02      CHILD DIED.....03      NIPPLE/BREAST PROBLEM.....04      NOT ENOUGH MILK.....05      MOTHER WORKING.....06      CHILD REFUSED.....07      WEANING AGE/AGE TO STOP....08      BECAME PREGNANT.....09      STARTED USING      CONTRACEPTION.....10      OTHER.....96  <small>(SPECIFY) (SKIP TO 442)</small> ←</p>																
438	How many times did you breastfeed (NAME) last night between sunset and sunrise?  IF ANSWER IS NOT NUMERIC PROBE FOR APPROXIMATE NUMBER.	<p>NUMBER OF NIGHTTIME FEEDINGS <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table></p>																	

		LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
439	How many times did you breastfeed (NAME) yesterday during the daylight hours?  IF ANSWER IS NOT NUMERIC PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS  ..... <input type="text"/> <input type="text"/>	
440	CHECK 435:	"YES" OR NO ENTRY IN 435 <input type="checkbox"/>  "NO" IN 435 <input type="checkbox"/>  (SKIP TO 442)	
441	Was (NAME) ever given water or anything else to drink or eat other than breastmilk?	YES.....1 NO.....2  ( SKIP TO 448) ←	YES.....1 NO.....2  ( SKIP TO 448) ←
442	How many months old was (NAME) when you first started giving him/her any food or liquid other than breastmilk?	MONTHS..... <input type="text"/> <input type="text"/>	MONTHS..... <input type="text"/> <input type="text"/>
443	CHECK 404:  CHILD ALIVE?	ALIVE <input type="checkbox"/>  DEAD <input type="checkbox"/>  (SKIP TO 448)	ALIVE <input type="checkbox"/>  DEAD <input type="checkbox"/>  (SKIP TO 445) (SKIP TO 448)
444	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES.....1 NO.....2 DON'T KNOW.....8	
445	At any time yesterday or last night, was (NAME) given any of the following:  Plain water? Sugar water? Juice/Herbal tea? Infant formula? Other milk? Any other liquid? Any food made from cereals (wheat, maize, rice, such as porridge, bread, or noodles)? Any food made from root crops (cassava, kamote or local tuber)? Eggs, fish, poultry, or meat? Any other solid or semi-solid foods?	YES NO DK  PLAIN WATER.....1 2 8 SUGAR WATER.....1 2 8 JUICE/HERBAL TEA.....1 2 8 INFANT FORMULA.....1 2 8 OTHER MILK.....1 2 8 OTHER LIQUIDS.....1 2 8 FOOD MADE FROM CEREALS.....1 2 8 FOOD MADE FROM ROOT CROPS.....1 2 8 EGGS/FISH/POULTRY/ MEAT.....1 2 8 OTHER SOLID/SEMI-SOLID FOODS.....1 2 8	YES NO DK  PLAIN WATER.....1 2 8 SUGAR WATER.....1 2 8 JUICE/HERBAL TEA.....1 2 8 INFANT FORMULA.....1 2 8 OTHER MILK.....1 2 8 OTHER LIQUIDS.....1 2 8 FOOD MADE FROM CEREALS.....1 2 8 FOOD MADE FROM ROOT CROPS.....1 2 8 EGGS/FISH/POULTRY/ MEAT.....1 2 8 OTHER SOLID/SEMI-SOLID FOODS.....1 2 8
446	CHECK 445:  FOOD OR LIQUID GIVEN YESTERDAY?	"YES" TO ONE/MORE <input type="checkbox"/> "NO"/"DK" TO ALL <input type="checkbox"/>  (SKIP TO 448)	"YES" TO ONE/MORE <input type="checkbox"/> "NO"/"DK" TO ALL <input type="checkbox"/>  (SKIP TO 448)

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
447	(Aside from breastfeeding,) how many times did (NAME) eat and/or drink yesterday, including both meals and snacks? <b>IF 7 OR MORE TIMES, RECORD "7".</b>	NUMBER OF TIMES ..... <input type="checkbox"/> DON'T KNOW ..... 8	NUMBER OF TIMES ..... <input type="checkbox"/> DON'T KNOW ..... 8
448		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 449.	IF NO MORE BIRTHS, GO TO 449; OR IF WITH SECOND-TO-LAST BIRTH SINCE JANUARY 1993, USE ANOTHER QUESTIONNAIRE.

REMARKS:

**SECTION 4B. IMMUNIZATION AND HEALTH**

449	ENTER THE NAME, LINE NUMBER, AND SURVIVAL STATUS OF EACH BIRTH SINCE JANUARY 1993 IN THE TABLE. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 2 BIRTHS, USE ADDITIONAL QUESTIONNAIRE).		
450	LINE NUMBER FROM 214	LAST BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>	NEXT-TO-LAST BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>
451	FROM 218 AND 221	NAME _____ ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO TO 451 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 478.)	NAME _____ ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO TO 451 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 478.)
452	Do you have a card where (NAME'S) vaccinations are written down?  IF YES: May I see it please?	YES, SEEN ..... 1 (SKIP TO 454) ←  YES, NOT SEEN ..... 2 (SKIP TO 456) ←  NO CARD ..... 3	YES, SEEN ..... 1 (SKIP TO 454) ←  YES, NOT SEEN ..... 2 (SKIP TO 456) ←  NO CARD ..... 3
453	Did you ever have a vaccination card for (NAME)?	YES ..... 1 (SKIP TO 456) ←  NO ..... 2	YES ..... 1 (SKIP TO 456) ←  NO ..... 2
454	(1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD.  (2) WRITE "44" IN "MONTH" COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED	MONTH DAY YEAR  BCG ..... DPT 1 ..... DPT 2 ..... DPT 3 ..... Polio 1 ..... Polio 2 ..... Polio 3 ..... Measles .....	MONTH DAY YEAR  BCG ..... DPT 1 ..... DPT 2 ..... DPT 3 ..... P1 ..... P2 ..... P3 ..... MEASLES .....
455	Has (NAME) received any vaccinations that was not recorded on this card?  RECORD "YES" ONLY IF RESPONDENT MENTIONS BCG, POLIO 1-3, DPT 1-3, AND/OR MEASLES VACCINE(S)	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE "66" IN THE CORRESPONDING MONTH COLUMN IN 454)  NO ..... 2 DON'T KNOW ..... 8  (SKIP TO 457L) ←	YES ..... 1 (PROBE FOR VACCINATIONS AND WRITE "66" IN THE CORRESPONDING MONTH COLUMN IN 454)  NO ..... 2 DON'T KNOW ..... 8  (SKIP TO 457L) ←

		LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
456	CHECK 222: AGE OF CHILD = "00"?	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
456A	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES ..... 1 NO ..... 2  (SKIP TO 457P) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 457P) ← DON'T KNOW ..... 8
457	Please tell me if (NAME) received any of the following vaccinations:		
457A	A BCG vaccination against tuberculosis, that is, an injection in the left shoulder that caused a scar?	YES ..... 1 NO ..... 2  (SKIP TO 457C) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 457C) ← DON'T KNOW ..... 8
457B	Did (NAME) receive this <u>BCG</u> vaccine before his/her first birthday?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
	DO NOT ASK THIS QUESTION IF "YES" IN 456.		
457C	Polio vaccine, that is, drops in the mouth ?	YES ..... 1 NO ..... 2  (SKIP TO 457F) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 457F) ← DON'T KNOW ..... 8
457D	How many times?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
457E	Did (NAME) receive this <u>third (last)</u> polio vaccine before his/her first birthday?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
	DO NOT ASK THIS QUESTION IF "YES" IN 456.		
457F	DPT vaccination, that is, an injection in the thigh that is usually given at the same time as polio drops?	YES ..... 1 NO ..... 2  (SKIP TO 457J) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 457J) ← DON'T KNOW ..... 8
457G	How many times?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
457H	Did (NAME) receive this <u>third (last)</u> DPT vaccine before his /her first birthday?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
	DO NOT ASK THIS QUESTION IF "YES" IN 456.		
457J	An injection to prevent measles?	YES ..... 1 NO ..... 2  (SKIP TO 457L) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 457L) ← DON'T KNOW ..... 8
457K	Did (NAME) receive this <u>measles</u> vaccine before his/her first birthday?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
	DO NOT ASK THIS QUESTION IF "YES" IN 456.		

		LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
457L	CHECK 456 (OR 222):  AGE OF CHILD = "00"?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  (SKIP TO 457T)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  (SKIP TO 457T)
457M	CHECK 452:  SEEN CARD?	SEEN (CODE "1" IN 452) <input type="checkbox"/> NOT SEEN/NO CARD (CODE "2" OR "3" IN 452) <input checked="" type="checkbox"/>  (SKIP TO 457O)	SEEN (CODE "1" IN 452) <input type="checkbox"/> NOT SEEN/NO CARD (CODE "2" OR "3" IN 452) <input checked="" type="checkbox"/>  (SKIP TO 457O)
457N	GO BACK TO 454, IF ALL ROWS FILLED UP ASK:  Did (NAME) receive BCG, 3 doses of Polio and DPT and Measles Vaccines before his/her first birthday?  OTHERWISE, DO NOT ASK THIS QUESTION, ENTER "X" FOR "NO" AND SKIP TO 457R.	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  (SKIP TO 457T) (SKIP TO 457R)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  (SKIP TO 457T) (SKIP TO 457R)
457O	CHECK 457B:  457D: = "3" AND 457E = "YES" 457G: = "3" AND 457H = "YES" 457K:  RECEIVED VACCINATION BEFORE FIRST BIRTHDAY?	YES <input type="checkbox"/> NO/NO ENTRY <input checked="" type="checkbox"/>  BCG.....1 2 <input type="checkbox"/> Polio.....1 2 <input type="checkbox"/> DPT.....1 2 <input type="checkbox"/> Measles.....1 2 <input type="checkbox"/>  (SKIP TO 457T) (SKIP TO 457R)	YES <input type="checkbox"/> NO/NO ENTRY <input checked="" type="checkbox"/>  BCG.....1 2 <input type="checkbox"/> Polio.....1 2 <input type="checkbox"/> DPT.....1 2 <input type="checkbox"/> Measles.....1 2 <input type="checkbox"/>  (SKIP TO 457T) (SKIP TO 457R)
457P	CHECK 456:  AGE OF CHILD = "00"?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  (SKIP TO 458)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>  (SKIP TO 458)
457R	What are the reasons why (NAME) did not complete (have any) vaccination before reaching his/her first birthday?  RECORD ALL RESPONSES MENTIONED.	UNAWARE OF NEEDS FOR IMMUNIZATION.....A UNAWARE OF NEED TO RETURN FOR SECOND OR THIRD DOSE.....B FEAR OF SIDE REACTIONS, WRONG IDEAS ABOUT CONTRAINDICATIONS.....C POSTPONED UNTIL ANOTHER TIME.....D NO FAITH IN IMMUNIZATION.....E RUMORS.....F PLACE OF IMMUNIZATION TOO FAR.....G TIME FOR IMMUNIZATION INCONVENIENT.....H VACCINATOR ABSENT.....I MOTHER TOO BUSY.....J FAMILY PROBLEM, INCLUDING ILLNESS OF MOTHER.....K CHILD ILL-NOT BROUGHT.....L CHILD ILL-BROUGHT BUT NOT GIVEN IMMUNIZATION.....M LONG WAITING TIME.....N OTHER_____X (SPECIFY)	UNAWARE OF NEEDS FOR IMMUNIZATION.....A UNAWARE OF NEED TO RETURN FOR SECOND OR THIRD DOSE.....B FEAR OF SIDE REACTIONS, WRONG IDEAS ABOUT CONTRAINDICATIONS.....C POSTPONED UNTIL ANOTHER TIME.....D NO FAITH IN IMMUNIZATION.....E RUMORS.....F PLACE OF IMMUNIZATION TOO FAR.....G TIME FOR IMMUNIZATION INCONVENIENT.....H VACCINATOR ABSENT.....I MOTHER TOO BUSY.....J FAMILY PROBLEM, INCLUDING ILLNESS OF MOTHER.....K CHILD ILL-NOT BROUGHT.....L CHILD ILL-BROUGHT BUT NOT GIVEN IMMUNIZATION.....M LONG WAITING TIME.....N OTHER_____X (SPECIFY)

		LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
457S	CHECK 456A: EVER RECEIVED VACCINATION?	YES/NO ENTRY <input type="checkbox"/> NO <input type="checkbox"/>  (SKIP TO 458)	YES/NO ENTRY <input type="checkbox"/> NO <input type="checkbox"/>  (SKIP TO 458)
457T	Did (NAME) receive an injection to prevent Hepatitis B?	YES ..... 1 NO ..... 2  (SKIP TO 458) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 458) ← DON'T KNOW ..... 8
457U	How many times?	NUMBER OF TIMES ..... <input type="checkbox"/>	NUMBER OF TIMES ..... <input type="checkbox"/>
458	At any time during the last six months, did (NAME) receive any of the following:	YES NO DK  Vitamin A capsule? VITAMIN A ..... 1 2 8 Iodine capsule? IODINE ..... 1 2 8 Iron drops/syrup? IRON ..... 1 2 8	YES NO DK  VITAMIN A ..... 1 2 8 IODINE ..... 1 2 8 IRON ..... 1 2 8
459	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
460	Has (NAME) been ill with a cough at any time in the last 2 weeks?	YES ..... 1 NO ..... 2  (SKIP TO 465) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2  (SKIP TO 465) ← DON'T KNOW ..... 8
461	When (NAME) was ill with a cough, did he/she breathe faster than usual with short, fast breaths?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
462	Did you seek advice or treatment for the cough?	YES ..... 1 NO ..... 2  (SKIP TO 465) ←	YES ..... 1 NO ..... 2  (SKIP TO 465) ←
463	Where did you seek advice or treatment?  Anywhere else?  RECORD ALL MENTIONED.	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC/CHHC ..... A RURAL HEALTH UNIT/ URBAN HEALTH CENTER ..... B BARANGAY HEALTH STATION ..... C COMM. HEALTH WORKER ..... D OTHER PUBLIC ..... E  (SPECIFY)  PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... F PHARMACY ..... G PRIVATE DOCTOR/MIDWIFE/ NURSE ..... H STORE ..... I INDUSTRY-BASED CLINIC ..... J BOY SCOUTS/GIRL SCOUTS ..... K JAYCEES ..... L OTHER PRIVATE ..... M  (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC/CHHC ..... A RURAL HEALTH UNIT/ URBAN HEALTH CENTER ..... B BARANGAY HEALTH STATION ..... C COMM. HEALTH WORKER ..... D OTHER PUBLIC ..... E  (SPECIFY)  PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... F PHARMACY ..... G PRIVATE DOCTOR/MIDWIFE/ NURSE ..... H STORE ..... I INDUSTRY-BASED CLINIC ..... J BOY SCOUTS/GIRL SCOUTS ..... K JAYCEES ..... L OTHER PRIVATE ..... M  (SPECIFY)

		LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
464	What was given to treat the cough?	INJECTION..... A ANTIBIOTIC (PILL OR SYRUP)..... B COUGH SYRUP..... C OTHER PILL OR SYRUP..... D UNKNOWN PILL OR SYRUP..... E HOME REMEDY/HERBAL MEDICINE..... F  OTHER _____ X (SPECIFY) NOTHING GIVEN..... Y	INJECTION..... A ANTIBIOTIC (PILL OR SYRUP)..... B COUGH SYRUP..... C OTHER PILL OR SYRUP..... D UNKNOWN PILL OR SYRUP..... E HOME REMEDY/HERBAL MEDICINE..... F  OTHER _____ X (SPECIFY) NOTHING GIVEN..... Y
465	Has (NAME) had diarrhea in the last 2 weeks?	YES..... 1 NO..... 2 DON'T KNOW..... 8	YES..... 1 NO..... 2 DON'T KNOW..... 8
466	Was there any blood in the stools?	YES..... 1 NO..... 2 DON'T KNOW..... 8	YES..... 1 NO..... 2 DON'T KNOW..... 8
467	CHECK 435: LAST CHILD STILL BREASTFEED?	YES <input type="checkbox"/> NO <input type="checkbox"/>  (SKIP TO 469)	
468	During (NAME'S) diarrhea, did you maintain the same number of breastfeeds, did you increase the number of breastfeeds, did you reduce the number of breastfeeds, or did you stop breastfeeding completely altogether?	MAINTAINED THE SAME..... 1 INCREASED..... 2 REDUCED..... 3 STOPPED..... 4	
469	On that worst day of the diarrhea, how many bowel movements did (NAME) have?	NUMBER OF BOWEL MOVEMENTS..... <input type="checkbox"/> <input type="checkbox"/>  DON'T KNOW..... 98	NUMBER OF BOWEL MOVEMENTS..... <input type="checkbox"/> <input type="checkbox"/>  DON'T KNOW..... 98
470	(Aside from breastfeeding), was (NAME) given the same amount to drink as before the diarrhea, or more, or less, or not given anything to drink at all?	SAME..... 1 MORE..... 2 LESS..... 3 NOTHING..... 4 DON'T KNOW..... 8	SAME..... 1 MORE..... 2 LESS..... 3 NOTHING..... 4 DON'T KNOW..... 8
471	Was (NAME) given the same amount of food to eat as before the diarrhea, or more, or less, or not given anything to eat at all?	SAME..... 1 MORE..... 2 LESS..... 3 NOTHING..... 4 DON'T KNOW..... 8	SAME..... 1 MORE..... 2 LESS..... 3 NOTHING..... 4 DON'T KNOW..... 8

		LAST BIRTH	NEXT-TO-LAST BIRTH
		NAME _____	NAME _____
472	<p>When (NAME) had diarrhea, was he/she given any of the following to drink:</p> <p>Fluid from ORS preparation (ORESOL/Hydrite)? Rice water/'am' Home-made sugar-salt-water solution?</p> <p>Tea/herbal drinks/softdrinks/softdrinks with starch?</p> <p>Milk/infant formula? Rice/corn coffee? Coconut water/broth/soups?</p> <p>Water? Any other liquid?</p>	<p>YES NO DK</p> <p>ORS PREPARATION ..... 1 2 8 RICE WATER/'AM' ..... 1 2 8 HOME-MADE SUGAR-SALT-WATER SOLUTION ..... 1 2 8 TEA/HERBAL DRINKS/ SOFTDRINKS/SOFTDRINKS WITH STARCH ..... 1 2 8 MILK/INFANT FORMULA ..... 1 2 8 RICE/CORN COFFEE ..... 1 2 8 COCONUT WATER/BROTH/ SOUPS ..... 1 2 8 WATER ..... 1 2 8 OTHER LIQUID ..... 1 2 8</p>	<p>YES NO DK</p> <p>ORS PREPARATION ..... 1 2 8 RICE WATER/'AM' ..... 1 2 8 HOME-MADE SUGAR-SALT-WATER SOLUTION ..... 1 2 8 TEA/HERBAL DRINKS/ SOFTDRINKS/SOFTDRINKS WITH STARCH ..... 1 2 8 MILK/INFANT FORMULA ..... 1 2 8 RICE/CORN COFFEE ..... 1 2 8 COCONUT WATER/BROTH/ SOUPS ..... 1 2 8 WATER ..... 1 2 8 OTHER LIQUID ..... 1 2 8</p>
473	Was anything (else) given to treat the diarrhea?	<p>YES ..... 1 NO ..... 2 <b>(SKIP TO 475)</b> ← DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 <b>(SKIP TO 475)</b> ← DON'T KNOW ..... 8</p>
474	What was given to treat the diarrhea?  Anything else?  RECORD ALL MENTIONED.	<p>RECOMMENDED HOME FLUID ..... A PILL OR SYRUP ..... B INJECTION ..... C (I.V.) INTRAVENOUS ..... D HOME REMEDIES/ HERBAL MEDICINES ..... E  OTHER ..... X (SPECIFY)</p>	<p>RECOMMENDED HOME FLUID ..... A PILL OR SYRUP ..... B INJECTION ..... C (I.V.) INTRAVENOUS ..... D HOME REMEDIES/ HERBAL MEDICINES ..... E  OTHER ..... X (SPECIFY)</p>
475	Did you seek advice or treatment for the diarrhea?	<p>YES ..... 1 NO ..... 2 <b>(SKIP TO 477)</b> ←</p>	<p>YES ..... 1 NO ..... 2 <b>(SKIP TO 477)</b> ←</p>
476	Where did you seek advice or treatment?  Anywhere else?  RECORD ALL MENTIONED.	<p>PUBLIC SECTOR GOVT. HOSPITAL/CLINIC/CHHC ... A RURAL HEALTH UNIT/ URBAN HEALTH CENTER ..... B BARANGAY HEALTH STATION ..... C COMM. HEALTH WORKER ..... D  OTHER PUBLIC ..... E  (SPECIFY) PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... F PHARMACY ..... G PRIVATE DOCTOR/MIDWIFE/ NURSE ..... H STORE ..... I INDUSTRY-BASED CLINIC ..... J BOY SCOUTS/GIRL SCOUTS ..... K JAYCEES ..... L OTHER PRIVATE ..... M  (SPECIFY)</p>	<p>PUBLIC SECTOR GOVT. HOSPITAL/CLINIC/CHHC ... A RURAL HEALTH UNIT/ URBAN HEALTH CENTER ..... B BARANGAY HEALTH STATION ..... C COMM. HEALTH WORKER ..... D  OTHER PUBLIC ..... E  (SPECIFY) PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... F PHARMACY ..... G PRIVATE DOCTOR/MIDWIFE/ NURSE ..... H STORE ..... I INDUSTRY-BASED CLINIC ..... J BOY SCOUTS/GIRL SCOUTS ..... K JAYCEES ..... L OTHER PRIVATE ..... M  (SPECIFY)</p>
477		GO BACK TO 451 IN NEXT COLUMN : OR, IF NO MORE BIRTHS, GO TO 478	GO BACK TO 451 IN NEXT COLUMN : OR, IF NO MORE BIRTHS, GO TO 478

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
478	CHECK 472, ALL COLUMNS: NO CHILD RECEIVED ORS PREPARATION (ORESOL/HYDRITE)	ANY CHILD RECEIVED ORS PREPARATION (ORESOL/HYDRITE)	<input type="checkbox"/> → 481
479	Have you ever heard of a special product called ORESOL or HYDRITE you can get for the treatment of diarrhea?	YES ..... 1 NO ..... 2	→ 481
480	Have you ever seen packets like these before? SHOW ORESOL PACKET OR HYDRITE TABLET.	YES ..... 1 NO ..... 2	→ 485
481	Have you ever prepared a solution with one of these packets/tablets or any other ORS for yourself or someone else to treat diarrhea? SHOW ORESOL PACKET OR HYDRITE TABLET.	YES, ORESOL ..... 1 YES, HYDRITE OR OTHER ORS ..... 2 NO ..... 3	<input type="checkbox"/> → 484
482	The last time you prepared the ORESOL solution, did you use the whole packet at one time or only part of the packet?	WHOLE PACKET AT ONE TIME ..... 1 PART OF THE PACKET ..... 2	→ 484
483	How much water did you use to prepare ORESOL the last time you made it?	½ LITER ..... 1 1 LITER ..... 2 1 ½ LITERS ..... 3 2 LITERS ..... 4 FOLLOWED INSTRUCTIONS ON PACKAGE ..... 5 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8	
484	Where can you get a packet/tablet of ORS like ORESOL, HYDRITE?  PROBE: Anywhere else?  RECORD ALL MENTIONED.	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC/CHHC ..... A RURAL HEALTH UNIT/ URBAN HEALTH CENTER ..... B BARANGAY HEALTH STATION ..... C COMM. HEALTH WORKER ..... D OTHER PUBLIC ..... E (SPECIFY)  PRIVATE SECTOR PVT. HOSPITAL/CLINIC ..... F PHARMACY ..... G PRIVATE DOCTOR/MIDWIFE/ NURSE ..... H STORE ..... I INDUSTRY-BASED CLINIC ..... J BOY SCOUTS/GIRL SCOUTS ..... K JAYCEES ..... L OTHER PRIVATE ..... M (SPECIFY)	
485	When a child has diarrhea, should he/she be given the same amount to drink as before the diarrhea, or more, or less, or not given anything to drink at all?	SAME ..... 1 MORE ..... 2 LESS ..... 3 NOTHING ..... 4 DON'T KNOW ..... 8	
486	When a child has diarrhea, should he/she be given the same amount to eat as before the diarrhea, or more, or less, or not given any thing to eat at all?	SAME ..... 1 MORE ..... 2 LESS ..... 3 NOTHING ..... 4 DON'T KNOW ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
487	When a child is sick with diarrhea, what signs of the illness would tell you that he or she should be taken to a health facility or health worker?  RECORD ALL MENTIONED.	REPEATED WATERY STOOLS.....A ANY WATERY STOOLS.....B REPEATED VOMITING.....C ANY VOMITING.....D BLOOD IN STOOLS.....E FEVER.....F MARKED THIRST.....G NOT EATING/NOT DRINKING WELL...H GETTING SICKER/VERY SICK.....I NOT GETTING BETTER.....J  OTHER _____ X (SPECIFY) DON'T KNOW.....Z	
488	When a child is sick with a cough, what signs of the illness would tell you that he or she should be taken to a health facility or health worker?  RECORD ALL MENTIONED.	FAST BREATHING.....A DIFFICULT BREATHING.....B NOISY BREATHING.....C FEVER.....D UNABLE TO DRINK.....E NOT EATING/NOT DRINKING WELL...F GETTING SICKER/VERY SICK.....G PERSISTENT COUGH.....H NOT GETTING BETTER .....I OTHER _____ X (SPECIFY) DON'T KNOW.....Z	

REMARKS:

**SECTION 5. MARRIAGE**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	PRESENCE OF OTHERS AT THIS POINT.	YES CHILDREN UNDER 10.....1 NO CHILDREN UNDER 10.....2 YES HUSBAND/PARTNER.....1 NO HUSBAND/PARTNER.....2 YES OTHER MALES.....1 NO OTHER MALES.....2 YES OTHER FEMALES.....1 NO OTHER FEMALES.....2	
502	Are you currently married or living with a man?	YES, CURRENTLY MARRIED.....1 YES, LIVING WITH A MAN.....2 NO, NOT IN UNION.....3	507
503	Do you currently have a regular sexual partner, an occasional sexual partner, or no sexual partner at all?	REGULAR SEXUAL PARTNER.....1 OCCASIONAL SEXUAL PARTNER.....2 NO SEXUAL PARTNER.....3	
504	Have you ever been married or lived with a man?	YES, FORMERLY MARRIED.....1 YES, LIVED WITH A MAN.....2 NO.....3	506 509
505	ENTER "0" IN COLUMN 3 OF CALENDAR IN THE MONTH OF INTERVIEW, AND IN EACH MONTH BACK TO JANUARY 1993		516
506	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3	509
507	Is your husband/partner staying with you now or is he staying elsewhere?	STAYING WITH HER.....1 STAYING ELSEWHERE.....2	
508	During the last four weeks, how many days were you and your husband/partner apart?	DAYS.....	
509	Have you been married or lived with a man only once, or more than once?	ONCE.....1 MORE THAN ONCE.....2	
510	In what month and year did you start living with your (first) husband/partner?	MONTH..... DK MONTH.....98 YEAR..... DK YEAR.....9998	512
511	How old were you when you started living with him?	AGE.....	
512	CHECK 509:  MARRIED OR LIVED WITH A MAN MORE THAN ONCE	MARRIED OR LIVED WITH A MAN ONLY ONCE	515
513	In what month and year did you start living with your current/last husband/partner?	MONTH..... DK MONTH.....98 YEAR..... DK YEAR.....9998	515
514	How old were you when you started living with him?	AGE.....	

515	DETERMINE MONTHS MARRIED OR IN UNION SINCE JANUARY 1993. ENTER "X" IN COLUMN 3 OF CALENDAR FOR EACH MONTH MARRIED OR IN UNION, AND ENTER "0" FOR EACH MONTH NOT MARRIED/NOT IN UNION, SINCE JANUARY 1993.  FOR WOMEN WITH MORE THAN ONE UNION: PROBE FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS.  FOR WOMEN NOT CURRENTLY IN UNION: PROBE FOR DATE WHEN LAST UNION STARTED AND FOR TERMINATION DATE AND, IF APPROPRIATE, FOR THE STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS.	
516	Now I need to ask some details about your sexual activity (if ever) in order to gain a better understanding of some family planning issues.  How many times (if ever) did you have sexual intercourse in the last four weeks?	TIMES..... <input type="text"/> <input type="text"/> NEVER HAD SEXUAL INTERCOURSE..... 90 → 601
517	How many times in a month do you usually have sexual intercourse?	TIMES..... <input type="text"/> <input type="text"/>
518	When was the last time you had sexual intercourse?	DAYS AGO..... 1 <input type="text"/> WEEKS AGO..... 2 <input type="text"/> MONTHS AGO..... 3 <input type="text"/> YEARS AGO..... 4 <input type="text"/> BEFORE LAST BIRTH..... 996
519	How old were you when you first had sexual intercourse?	AGE..... <input type="text"/> <input type="text"/> FIRST TIME WHEN MARRIED..... 96
520	How old were you when you had your first menstrual period?	AGE..... <input type="text"/> <input type="text"/>

**SECTION 6. FERTILITY PREFERENCES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
601	CHECK 316: NEITHER STERILIZED <input type="checkbox"/>  HE OR SHE STERILIZED <input type="checkbox"/>		614								
602	CHECK 236: NOT PREGNANT OR UNSURE <input type="checkbox"/>  PREGNANT <input type="checkbox"/>  Now I have some questions about the future.  Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE/NONE ..... 2 SAYS SHE CAN'T GET PREGNANT ..... 3 UNDECIDED/DON'T KNOW ..... 8	604 606 604								
603	CHECK 236: NOT PREGNANT OR UNSURE <input type="checkbox"/>  PREGNANT <input type="checkbox"/>  How long would you like to wait from now before the birth of (a/another) child?  After the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS ..... 1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> YEARS ..... 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> SOON/NOW ..... 993 SAYS SHE CAN'T GET PREGNANT ..... 994 AFTER MARRIAGE ..... 995 OTHER ..... 996 (SPECIFY) DON'T KNOW ..... 998									606
604	CHECK 236: NOT PREGNANT OR UNSURE <input type="checkbox"/>  PREGNANT <input type="checkbox"/>		607								
605	If you became pregnant in the next few weeks, would you be <u>happy</u> , <u>unhappy</u> , or would it <u>not matter</u> very much?	HAPPY ..... 1 UNHAPPY ..... 2 WOULD NOT MATTER ..... 3									
606	CHECK 315: USING A METHOD?  NOT CURRENTLY USING <input type="checkbox"/> OR 315 NOT ASKED <input type="checkbox"/>	CURRENTLY USING <input type="checkbox"/> OR 315 ASKED	614								
607	Do you think you will use a method to delay or avoid pregnancy within the next 12 months?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8	609								
608	Do you think you will use a method to delay or avoid pregnancy at any time in the future?	YES ..... 1 NO ..... 2 DONT KNOW ..... 8	612								

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																		
609	Which method would you prefer to use?	PILL.....01 IUD.....02 INJECTIONS.....03 CONDOM.....04 FEMALE STERILIZATION.....05 MALE STERILIZATION.....06 CALENDAR/RHYTHM/PERIODIC ABSTINENCE.....07 MUCUS/BILLINGS/OVULATION.....08 BASAL BODY TEMPERATURE.....09 SYMPTOTHERMAL.....10 LACTATIONAL AMENORRHEA METHOD (LAM).....11 → 614 BREASTFEEDING.....12 WITHDRAWAL.....13 OTHER.....96 (SPECIFY) UNSURE.....98																																			
610	Would you be willing to pay for (METHOD)?	YES .....1 NO .....2 DON'T KNOW .....8 → 614																																			
611	How much would you be willing to pay for (METHOD) (including all costs)? <p>P 10?  P 20?  P 25?  P 30?  P 50?  P 75?  P 100?  P 150?  P 200?  P 300?  P 500?  P 750?  P 1000?  P 1500?  P 2000?  P 3000?  More than P3000?</p>	<p style="text-align: center;">YES      NO</p> <table> <tbody> <tr><td>P10.....1</td><td>2</td></tr> <tr><td>P20.....1</td><td>2</td></tr> <tr><td>P25.....1</td><td>2</td></tr> <tr><td>P30.....1</td><td>2</td></tr> <tr><td>P50.....1</td><td>2</td></tr> <tr><td>P75.....1</td><td>2</td></tr> <tr><td>P100.....1</td><td>2</td></tr> <tr><td>P150.....1</td><td>2</td></tr> <tr><td>P200.....1</td><td>2</td></tr> <tr><td>P300.....1</td><td>2</td></tr> <tr><td>P500.....1</td><td>2</td></tr> <tr><td>P750.....1</td><td>2</td></tr> <tr><td>P1000.....1</td><td>2</td></tr> <tr><td>P1500.....1</td><td>2</td></tr> <tr><td>P2000.....1</td><td>2</td></tr> <tr><td>P3000.....1</td><td>2</td></tr> <tr><td>More than P3000.....1</td><td>2</td></tr> </tbody> </table>	P10.....1	2	P20.....1	2	P25.....1	2	P30.....1	2	P50.....1	2	P75.....1	2	P100.....1	2	P150.....1	2	P200.....1	2	P300.....1	2	P500.....1	2	P750.....1	2	P1000.....1	2	P1500.....1	2	P2000.....1	2	P3000.....1	2	More than P3000.....1	2	614
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P3000.....1	2																																				
More than P3000.....1	2																																				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	What is the main reason that you think you will never use a method?	NOT CURRENTLY MARRIED.....11 FERTILITY-RELATED REASONS INFREQUENT SEX .....21 MENOPAUSAL/HYSTERECTOMY ..22 SUBFECUND/INFECUND .....23 WANTS MORE CHILDREN .....24 OPPOSITION TO USE RESPONDENT OPPOSED.....31 HUSBAND OPPOSED.....32 OTHERS OPPOSED.....33 RELIGIOUS PROHIBITION.....34 LACK OF KNOWLEDGE 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 INTERFERES WITH BODY'S NORMAL PROCESSES .....56 OTHER .....96 (DSPECIFY) DON'T KNOW .....98	614
613	Would you ever use a method if you were married?	YES .....1 NO .....2 DON'T KNOW .....8	
614	CHECK 221: HAS LIVING CHILDREN <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/> <p>If you could go back to the time you you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?</p> <p>PROBE FOR A NUMERIC RESPONSE.</p>	NUMBER..... <input type="text"/> <input type="text"/> OTHER .....96 (DSPECIFY)	616
615	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter?	BOYS NUMBER..... <input type="text"/> <input type="text"/> OTHER .....96 (DSPECIFY) GIRLS NUMBER..... <input type="text"/> <input type="text"/> OTHER .....96 (DSPECIFY) EITHER NUMBER..... <input type="text"/> <input type="text"/> OTHER .....96 (DSPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
616	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE.....1 DISAPPROVE.....2 NO OPINION.....3	
617	Is it acceptable or not acceptable to you for information on family planning to be provided:  On the radio? On the television?	NOT ACCEPT-ABLE.....1 ACCEPT-ABLE.....2 DK RADIO.....1 2 8 TELEVISION.....1 2 8	
618	In the last few months have you heard about family planning:  On the radio? On the television? In a newspaper or magazine? From a poster? From leaflets or brochures?	YES NO RADIO.....1 2 TELEVISION.....1 2 NEWSPAPER OR MAGAZINE.....1 2 POSTER.....1 2 LEAFLETS OR BROCHURES.....1 2	
619	Have you seen or heard the slogan "Kung sila'y mahal n'yo, magplano"?	YES.....1 NO.....2 → 621	
620	What does this slogan mean?	PRACTICE FAMILY PLANNING.....1 USE CONTRACEPTION.....2 OTHER.....6 (SPECIFY)	
621	In the last few months have you discussed the practice of family planning with your friends, neighbors, or relatives?	YES.....1 NO.....2 → 623	
622	With whom?  Anyone else?  RECORD ALL MENTIONED.	HUSBAND/PARTNER.....A MOTHER.....B FATHER.....C SISTER(S).....D BROTHER(S).....E DAUGHTER.....F MOTHER-IN-LAW.....G FRIENDS/NEIGHBORS.....H  OTHER.....X (SPECIFY)	
623	CHECK 502: YES, CURRENTLY MARRIED <input type="checkbox"/> YES, LIVING WITH A MAN <input type="checkbox"/>	NO, NOT IN UNION <input type="checkbox"/> → 701	
624	Spouses/partners do not always agree on everything. Now I want to ask you about your husband's/partner's views on family planning.  Do you think that your husband/partner approves or disapproves of couples using a method to avoid pregnancy?	APPROVES.....1 DISAPPROVES.....2 DON'T KNOW.....8	
625	How often have you talked to your husband/partner about family planning in the past year?	NEVER.....1 ONCE OR TWICE.....2 MORE OFTEN.....3	
626	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	

**SECTION 7. HUSBAND'S BACKGROUND, WOMAN'S WORK AND RESIDENCE**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 502 AND 504: CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/>  FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/>	NEVER MARRIED AND NEVER IN UNION <input type="checkbox"/>	703 708
702	How old was your husband/partner on his last birthday?	AGE..... <input type="checkbox"/> <input type="checkbox"/>	
703	Did your (last) husband/partner ever attend school?	YES..... 1 NO..... 2	705
704	What was the highest grade/year he completed?	NO GRADE COMPLETED..... 00 ELEMENTARY GRADE 1..... 11 ELEMENTARY GRADE 2..... 12 ELEMENTARY GRADE 3..... 13 ELEMENTARY GRADE 4..... 14 ELEMENTARY GRADE 5..... 15 ELEMENTARY GRADE 6..... 16 ELEMENTARY GRADE 7..... 17 HIGH SCHOOL YEAR 1..... 21 HIGH SCHOOL YEAR 2..... 22 HIGH SCHOOL YEAR 3..... 23 HIGH SCHOOL YEAR 4..... 24 HIGH SCHOOL GRADUATE..... 25 POSTSECONDARY YEAR 1..... 31 POSTSECONDARY YEAR 2 OR MORE..... 32 COLLEGE YEAR 1..... 41 COLLEGE YEAR 2..... 42 COLLEGE YEAR 3..... 43 COLLEGE YEAR 4..... 44 COLLEGE YEAR 5..... 45 COLLEGE YEAR 6 OR HIGHER..... 46 COLLEGE GRADUATE..... 47 POST-BACCALAUREATE..... 51 DON'T KNOW..... 98	
705	What (is/was) your (last) husband/partner's occupation?  That is, what kind of work (does/did) he mainly do?	<input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/>	
706	CHECK 705: WORKS (WORKED) IN AGRICULTURE <input type="checkbox"/>  DOES (DID) NOT WORK IN AGRICULTURE <input type="checkbox"/>		708
707	(Does/did) your husband/partner work mainly on his own land or on family land, or (does/did) he rent land, or (does/did) he work on someone else's land?	HIS LAND..... 1 FAMILY LAND..... 2 RENTED LAND..... 3 SOMEONE ELSE'S LAND..... 4 NOT APPLICABLE..... 5	
708	Now I would like to ask you some questions about your work. Aside from your own housework, are you currently working?	YES..... 1 NO..... 2	711
709	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	711

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
710	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2 → 726	
711	What is your occupation, that is, what kind of work do (did) you mainly do?		
712	CHECK 711: WORKS (WORKED) IN AGRICULTURE <input type="checkbox"/> DOES (DID) NOT WORK IN AGRICULTURE <input type="checkbox"/>	→ 714	
713	Do you work mainly on your own land or on family land, or do you rent land or work on someone else's land?	OWN LAND ..... 1 FAMILY LAND ..... 2 RENTED LAND ..... 3 SOMEONE ELSE'S LAND ..... 4 NOT APPLICABLE ..... 5	
714	Are you employed (as paid or unpaid worker) by a member of your family, or are you self-employed, or are you employed by someone else?	BY FAMILY MEMBER ..... 1 SELF-EMPLOYED ..... 2 BY SOMEONE ELSE ..... 3	
715	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR ..... 1 → 717 SEASONALLY/PART OF THE YEAR ..... 2 ONCE IN A WHILE ..... 3 → 718	
716	During the last 12 months, how many months did you work?	NUMBER OF MONTHS ..... <input type="checkbox"/> <input type="checkbox"/>	
717	During the last 12 months, how many days a week did you usually work (in the months that you worked) ?	NUMBER OF DAYS ..... <input type="checkbox"/> → 719	
718	During the last 12 months, approximately how many days did you work?	NUMBER OF DAYS ..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
719	Do you earn cash for your work? PROBE: Do you make money for working?	YES ..... 1 NO ..... 2 → 722	
720	How much do you usually earn for this work?  PROBE: Is this by the hour, by the day, by the week, by the month or by the year?	PER HOUR ..... 1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> PER DAY ..... 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> PER WEEK ..... 3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> PER MONTH ..... 4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> PER YEAR ..... 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> OTHER ..... 999996 (SPECIFY)	
721	CHECK 502: YES, CURRENTLY MARRIED <input type="checkbox"/> YES, LIVING WITH A MAN <input type="checkbox"/> NO, NOT IN UNION <input type="checkbox"/>  Who mainly decides how the money you earn will be used: you, your husband/partner, you and your husband/partner jointly, or someone else?  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 SOMEONE ELSE DECIDES ..... 4 JOINTLY WITH SOMEONE ELSE ..... 5	
722	Do you usually work at home or away from home?	HOME ..... 1	

	AWAY.....	2
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES
		SKIP
723	CHECK 222 AND 223: CHILD AGE 5 OR LESS LIVING AT HOME?  YES <input type="checkbox"/> NO <input type="checkbox"/>	726
724	CHECK 708 AND 709: CURRENTLY WORKING?  YES <input type="checkbox"/> NO <input type="checkbox"/>	726
725	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?	<p>RESPONDENT..... 01          HUSBAND/PARTNER..... 02          OLDER FEMALE CHILD..... 03          OLDER MALE CHILD..... 04          OTHER RELATIVES..... 05          NEIGHBORS..... 06          FRIENDS..... 07          SERVANTS/HIRED HELP..... 08          CHILD IS IN SCHOOL..... 09          INSTITUTIONAL CHILD CARE..... 10            OTHER_____ 96          (SPECIFY)</p>
726	Have you lived in only one barangay or in more than one barangay since January 1993?	<p>ONE BARANGAY..... 1          MORE THAN ONE          BARANGAY..... 2</p>
727	<p>IN COLUMN 4 OF CALENDAR, ENTER THE APPROPRIATE CODE FOR CURRENT BARANGAY, ("1" CITY, "2" TOWN/POBLACION, "3" BARRIO/RURAL AREA).          BEGIN IN THE MONTH OF INTERVIEW AND CONTINUE WITH ALL PRECEDING MONTHS BACK TO JANUARY 1993.</p> <p>THEN SKIP TO _____</p>	728
728	<p>In what month and year did you move to (NAME OF CURRENT BARANGAY)?            IN COLUMN 4 OF CALENDAR, ENTER "X" IN THE MONTH AND YEAR OF THE MOVE.          IN SUBSEQUENT MONTHS ENTER THE APPROPRIATE CODE FOR THE TYPE OF BARANGAY ("1" CITY, "2" TOWN/POBLACION, "3" BARRIO/RURAL AREA).          CONTINUE PROBING FOR PREVIOUS BARANGAY, AND RECORD MOVES AND TYPE OF BARANGAY ACCORDINGLY.</p> <p>ILLUSTRATIVE QUESTIONS:</p> <ul style="list-style-type: none"> <li>• Where did you live before....?</li> <li>• In what month and year did you arrive there?</li> <li>• Is that place a city, a town/poblacion, or barrio/rural area?</li> </ul>	801

**SECTION 8. MATERNAL MORTALITY**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER .....	<input type="checkbox"/> <input type="checkbox"/>
802	CHECK 801: TWO OR MORE BIRTHS <input type="checkbox"/> ONLY ONE BIRTH (RESPONDENT) <input type="checkbox"/>	→ 816	
803	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS .....	<input type="checkbox"/> <input type="checkbox"/>

REMARKS:

804	What was the name given to your brother or sister from eldest to youngest?	[01]	[02]	[03]	[04]	[05]	[06]
805	Is (NAME) male or female?	MALE.....1 FEMALE....2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2	MALE.....1 FEMALE...2
806	Is (NAME) still alive?	YES.....1 NO.....2 DK.....8 GO TO [02] ←	YES.....1 NO.....2 GO TO 808 ←	YES.....1 NO.....2 GO TO 808 ←	YES.....1 NO.....2 GO TO 808 ←	YES.....1 NO.....2 GO TO 808 ←	YES.....1 NO.....2 GO TO 808 ←
807	How old is (NAME) on his/her last b-day?	<input type="text"/> <input type="text"/> GO TO [02]	<input type="text"/> <input type="text"/> GO TO [03]	<input type="text"/> <input type="text"/> GO TO [04]	<input type="text"/> <input type="text"/> GO TO [05]	<input type="text"/> <input type="text"/> GO TO [06]	<input type="text"/> <input type="text"/> GO TO [07]
808	In what year did (NAME) die?	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ←	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ←	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ←	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ←	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ←	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ←
809	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>					
810	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [02]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [03]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [04]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [05]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [06]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [07]
811	Was (NAME) pregnant when she died?	YES.....1 NO.....2 GO TO 814 ←					
812	Did (NAME) die during childbirth?	YES.....1 NO.....2 GO TO 815 ←					
813	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES.....1 NO.....2 GO TO 815 ←					
814	Was her death due to complications of pregnancy or childbirth?	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8	YES.....1 NO.....2 DK.....8
815	How many children did (NAME) give birth to during her lifetime?	<input type="text"/> <input type="text"/> GO TO [02]	<input type="text"/> <input type="text"/> GO TO [03]	<input type="text"/> <input type="text"/> GO TO [04]	<input type="text"/> <input type="text"/> GO TO [05]	<input type="text"/> <input type="text"/> GO TO [06]	<input type="text"/> <input type="text"/> GO TO [07]

IF NO MORE BROTHERS OR SISTERS, GO TO 816

804	What was the name given to your brother or sister from eldest to youngest?	[07]	[08]	[09]	[10]	[11]	[12]
805	Is (NAME) male or female?	MALE ..... 1 FEMALE ..... 2					
806	Is (NAME) still alive?	YES ..... 1 NO ..... 2 DK ..... 8 GO TO [08] ↵	YES ..... 1 NO ..... 2 GO TO 808 ↵	YES ..... 1 NO ..... 2 GO TO 808 ↵	YES ..... 1 NO ..... 2 GO TO 808 ↵	YES ..... 1 NO ..... 2 GO TO 808 ↵	YES ..... 1 NO ..... 2 GO TO 808 ↵
807	How old is (NAME) on his/her last birthday?	<input type="text"/> <input type="text"/> GO TO [08]	<input type="text"/> <input type="text"/> GO TO [09]	<input type="text"/> <input type="text"/> GO TO [10]	<input type="text"/> <input type="text"/> GO TO [11]	<input type="text"/> <input type="text"/> GO TO [12]	<input type="text"/> <input type="text"/> GO TO [13]
808	In what year did (NAME) die?	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ↵	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ↵	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ↵	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ↵	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ↵	<input type="text"/> <input type="text"/> <input type="text"/> GO TO 810 ↵
809	How many years ago did (NAME) die?	<input type="text"/> <input type="text"/>					
810	How old was (NAME) when he/she died?	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [08]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [09]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [10]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [11]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [12]	<input type="text"/> <input type="text"/> IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [13]
811	Was (NAME) pregnant when she died?	YES ..... 1 GO TO 814 ↵					
812	Did (NAME) die during childbirth?	YES ..... 1 GO TO 815 ↵					
813	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES ..... 1 NO ..... 2 GO TO 815 ↵	YES ..... 1 NO ..... 2 GO TO 815 ↵	YES ..... 1 NO ..... 2 GO TO 815 ↵	YES ..... 1 NO ..... 2 GO TO 815 ↵	YES ..... 1 NO ..... 2 GO TO 815 ↵	YES ..... 1 NO ..... 2 GO TO 815 ↵
814	Was her death due to complications of pregnancy or childbirth?	YES ..... 1 NO ..... 2 DK ..... 8					
815	How many children did (NAME) give birth to during her lifetime?	<input type="text"/> <input type="text"/> GO TO [08]	<input type="text"/> <input type="text"/> GO TO [09]	<input type="text"/> <input type="text"/> GO TO [10]	<input type="text"/> <input type="text"/> GO TO [11]	<input type="text"/> <input type="text"/> GO TO [12]	<input type="text"/> <input type="text"/> GO TO [13]
IF NO MORE BROTHERS OR SISTERS, GO TO 816							
816	RECORD THE TIME ENDED.				HOUR.....	<input type="text"/> <input type="text"/>	
					MINUTES.....	<input type="text"/> <input type="text"/>	

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.  
FOR COLUMNS 1, 3, AND 4, ALL MONTHS SHOULD  
BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

**COL.1: Births, Pregnancies, Contraceptive Use**

B BIRTHS  
P PREGNANCIES  
T TERMINATIONS

- 0 NO METHOD
- 1 PILL
- 2 IUD
- 3 INJECTIONS
- 4 CONDOM
- 5 FEMALE STERILIZATION
- 6 MALE STERILIZATION
- 7 CALENDAR/RHYTHM/PERIODIC ABSTINENCE
- 8 MUCUS/BILLINGS/OVULATION
- 9 BASAL BODY TEMPERATURE
- A SYMPTOTHERMAL
- B LACTATIONAL AMENORRHEA METHOD
- C BREASTFEEDING
- D WITHDRAWAL
- X OTHER \_\_\_\_\_

(SPECIFY)

**COL.2: Discontinuation of Contraceptive Use**

- 0 INFREQUENT SEX/HUSBAND AWAY/OLD
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 HEALTH CONCERNS
- 6 SIDE EFFECTS
- 7 INACCESSIBLE/UNAVAILABLE
- 8 COST TOO MUCH
- 9 INCONVENIENT TO USE
- F FATALISTIC
- A DIFFICULT TO GET PREGNANT/  
HYSTERECTOMY/MENOPAUSE
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER \_\_\_\_\_

(SPECIFY)

Z DON'T KNOW

**COL.3: Marriage/Union**

- X IN UNION (MARRIED OR LIVING TOGETHER)
- 0 NOT IN UNION

**COL.4: Moves and Types of Barangay**

- X CHANGE OF BARANGAY
- 1 CITY
- 2 TOWN/POBLACION
- 3 BARRIO/RURAL AREA

12	DEC	01						01	DEC	
11	NOV	02						02	NOV	
10	OCT	03						03	OCT	
	SEP	04						04	SEP	
1	08	AUG	05					05	AUG	1
9	07	JUL	06					06	JUL	9
9	06	JUN	07					07	JUN	9
8	05	MAY	08					08	MAY	8
	04	APR	09					09	APR	
	03	MAR	10					10	MAR	
	02	FEB	11					11	FEB	
	01	JAN	12					12	JAN	
	12	DEC	13					13	DEC	
	11	NOV	14					14	NOV	
	10	OCT	15					15	OCT	
	09	SEP	16					16	SEP	
1	08	AUG	17					17	AUG	1
9	07	JUL	18					18	JUL	9
9	06	JUN	19					19	JUN	9
7	05	MAY	20					20	MAY	7
	04	APR	21					21	APR	
	03	MAR	22					22	MAR	
	02	FEB	23					23	FEB	
	01	JAN	24					24	JAN	
	12	DEC	25					25	DEC	
	11	NOV	26					26	NOV	
	10	OCT	27					27	OCT	
	09	SEP	28					28	SEP	
1	08	AUG	29					29	AUG	1
9	07	JUL	30					30	JUL	9
9	06	JUN	31					31	JUN	9
6	05	MAY	32					32	MAY	6
	04	APR	33					33	APR	
	03	MAR	34					34	MAR	
	02	FEB	35					35	FEB	
	01	JAN	36					36	JAN	
	12	DEC	37					37	DEC	
	11	NOV	38					38	NOV	
	10	OCT	39					39	OCT	
	09	SEP	40					40	SEP	
1	08	AUG	41					41	AUG	1
9	07	JUL	42					42	JUL	9
9	06	JUN	43					43	JUN	9
5	05	MAY	44					44	MAY	5
	04	APR	45					45	APR	
	03	MAR	46					46	MAR	
	02	FEB	47					47	FEB	
	01	JAN	48					48	JAN	
	12	DEC	49					49	DEC	
	11	NOV	50					50	NOV	
	10	OCT	51					51	OCT	
	09	SEP	52					52	SEP	
1	08	AUG	53					53	AUG	1
9	07	JUL	54					54	JUL	9
9	06	JUN	55					55	JUN	9
4	05	MAY	56					56	MAY	4
	04	APR	57					57	APR	
	03	MAR	58					58	MAR	
	02	FEB	59					59	FEB	
	01	JAN	60					60	JAN	
	12	DEC	61					61	DEC	
	11	NOV	62					62	NOV	
	10	OCT	63					63	OCT	
	09	SEP	64					64	SEP	
1	08	AUG	65					65	AUG	1
9	07	JUL	66					66	JUL	9
9	06	JUN	67					67	JUN	9
3	05	MAY	68					68	MAY	3
	04	APR	69					69	APR	
	03	MAR	70					70	MAR	
	02	FEB	71					71	FEB	
	01	JAN	72					72	JAN	

**INTERVIEWER'S OBSERVATIONS**  
To be filled in after completing interview

Comments  
about Respondent:

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Comments on  
Specific Questions:

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Any other Comments:

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**SUPERVISOR'S OBSERVATIONS**

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Name of Supervisor:

Date:

**EDITOR'S OBSERVATIONS**

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Name of Editor:

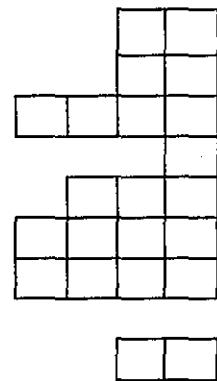
Date:

Republic of the Philippines  
 NATIONAL STATISTICS OFFICE  
 1998 NATIONAL DEMOGRAPHIC AND HEALTH SURVEY  
 HEALTH MODULE

Confidentiality: This survey is authorized by Commonwealth Act No. 591. All information is strictly confidential.

**IDENTIFICATION**

PROVINCE \_\_\_\_\_  
 CITY/MUNICIPALITY \_\_\_\_\_  
 BARANGAY \_\_\_\_\_  
 URBAN/RURAL(URBAN=1, RURAL=2) \_\_\_\_\_  
 NDS SAMPLE NUMBER \_\_\_\_\_  
 HOUSEHOLD CONTROL NUMBER \_\_\_\_\_  
 NDHS HOUSEHOLD SEQUENTIAL NUMBER \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 NAME AND LINE NUMBER OF RESPONDENT \_\_\_\_\_



**INTERVIEWER VISITS**

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY MONTH YEAR 1 9 9 8 INT. CODE RESULT*
INTERVIEWER'S NAME	_____	_____	_____	
RESULT*	_____	_____	_____	
NEXT VISIT: DATE TIME	_____	_____	_____	TOTAL NO. OF VISITS
RESULT CODES: *				TIME OF INTERVIEW
01 COMPLETED, ORIGINAL HOUSEHOLD 02 COMPLETED, PRESENT OCCUPANT OF DWELLING 03 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT 04 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME 05 POSTPONED 06 REFUSED 07 DWELLING VACANT OR ADDRESS NOT A DWELLING 08 DWELLING DESTROYED 09 DWELLING NOT FOUND 10 OTHER (SPECIFY)	TIME STARTED HOUR ..... MINUTES ...  TIME ENDED HOUR ..... MINUTES ...			

LANGUAGE OF QUESTIONNAIRE**	7	LANGUAGE OF INTERVIEW**	<input type="checkbox"/>
LOCAL LANGUAGE OF RESPONDENT**	<input type="checkbox"/>	TRANSLATOR USED	YES ..... 1 NO ..... 2
**LANGUAGE CODES			
1 TAGALOG 2 CEBUANO	3 ILOCANO 4 BICOL	5 HILIGAYNON 6 WARAY	7 ENGLISH 8 OTHER (SPECIFY)

SUPERVISOR _____  NAME _____  DATE _____	FIELD EDITOR _____  NAME _____  DATE _____	OFFICE EDITOR _____  <input type="checkbox"/>	KEYED BY _____  <input type="checkbox"/>
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**SECTION A. ENVIRONMENTAL HEALTH**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	How does your household usually dispose of garbage?	GARBAGE TRUCK/CART COLLECTION ..... 1 INDIVIDUAL OPEN DUMPING ..... 2 INDIVIDUAL BURNING ..... 3 COMPOSTING ..... 4 INDIVIDUAL BURYING ..... 5 FEEDING TO DOMESTIC ANIMALS ..... 6 DUMPING INTO LOW LAND AREA ..... 7 OTHERS, SPECIFY ..... 8	
2	How frequently is the garbage usually collected/disposed?	EVERYDAY ..... 1 ONCE IN TWO DAYS ..... 2 ONCE OR TWICE A WEEK ..... 3 OTHERS, SPECIFY ..... 4	
3	IS THERE A GARBAGE OR TRASH AROUND THE HOUSE OR YARD THAT ATTRACTS FLIES?	YES ..... 1 NO ..... 2	
4	Does your household regularly buy cooked food from...  Ambulant vendors? Carinderia? Restaurants?  ENCIRCLE "1," IF YES AND "2," IF NO.	YES      NO Ambulant vendors ..... 1      2 Carinderia ..... 1      2 Restaurants ..... 1      2	

**SECTION B. HEALTH FACILITY UTILIZATION**

1	During the last 6 months, did you visit a health facility? YES .....1 NO .....2 ➤ SKIP TO SECTION C									
2	What type of health facility did you visit? READ EACH FACILITY TO THE RESPONDENT. ENCIRCLE "1" IF THE RESPONDENT UTILIZED THE FACILITY. OTHERWISE, ENCIRCLE "2".			Regional Hospital 1 2 ➤ SKIP TO NEXT FACILITY		Provincial Hospital 1 2 ➤ SKIP TO NEXT FACILITY		District Hospital 1 2 ➤ SKIP TO NEXT FACILITY		
3	FOR COLS. 1,4,7 ASK: When you visited (FACILITY) what type of service did you utilize?			SERVICE AVAILED	SATIS-FIED/ DIS-SATIS-FIED	REASONS*	SERVICE AVAILED	SATIS-FIED/ DIS-SATIS-FIED	REASONS*	
4	FOR COLS. 2,5,8 ASK: Were you satisfied or dissatisfied with the service?			SATIS-FIED ...1	DIS-SATIS-FIED ...2		SATIS-FIED ...1	DIS-SATIS-FIED ...2		
5	FOR COLS. 3,6,9 ASK: Why were you satisfied or dissatisfied with the service?									
	TYPE OF SERVICE AVAILED READ EACH SERVICE TO THE RESPONDENT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	A. Treatment when ill or injured	1 2 ↓			1 2 ↓			1 2 ↓		
	B. Routine Check-ups	1 2 ↓			1 2 ↓			1 2 ↓		
	C. Laboratory Services	1 2 ↓			1 2 ↓			1 2 ↓		
	D. Immunization	1 2 ↓			1 2 ↓			1 2 ↓		
	E. Family Planning	1 2 ↓			1 2 ↓			1 2 ↓		
	F. Health and Nutrition Education	1 2 ↓			1 2 ↓			1 2 ↓		
	G. Prenatal, Delivery and Postnatal	1 2 ↓			1 2 ↓			1 2 ↓		
	H. Others _____ (SPECIFY)	1 2			1 2			1 2		

\*CODES FOR REASONS FOR SATISFACTION/DISSATISFACTION (DO NOT READ TO RESPONDENT)

- AVAILABILITY OF MEDICINE..... A
- POTENCY/EFFECTIVITY OF MEDICINES GIVEN .....
- ADEQUACY OF HEALTH EQUIPMENT AND OTHER FACILITIES .....
- AVAILABILITY AND ACCESSABILITY OF HEALTH PERSONNEL .....
- HEALTH PERSONNEL APPROACHABILITY .....
- TECHNICAL COMPETENCY OF HEALTH PERSONNEL .....
- COURTEOUSNESS OF HEALTH CARE FACILITY STAFF .....
- CHARGES FOR SERVICES OR MEDICINES .....
- IMPORTANCE GIVEN TO PATIENTS' RIGHT IN HEALTH CARE .....
- AVAILABILITY/QUALITY OF LINENS/BEDDINGS .....
- AVAILABILITY /QUALITY OF FOOD .....
- AVAILABILITY OF SERVICE .....
- OTHERS, SPECIFY .....

**SECTION B. HEALTH FACILITY UTILIZATION**

	Municipal Hospital			Rural Health Unit			Barangay Health Station		
	1	2	SKIP TO NEXT FACILITY	1	2	SKIP TO NEXT FACILITY	1	2	SKIP TO NEXT FACILITY
3 FOR COLS. 10,13,16 ASK: When you visited (FACILITY) what type of service did you utilize?	SERVICE AVAILED	SATIS- FIED/ DIS- SATIS- FIED	REASONS*	SERVICE AVAILED	SATIS- FIED/ DIS- SATIS- FIED	REASONS*	SERVICE AVAILED	SATIS- FIED/ DIS- SATIS- FIED	REASONS*
4 FOR COLS. 11,14,17 ASK: Were you satisfied or dissatisfied with the service?									
5 FOR COLS. 12,15,18 ASK: Why were you satisfied or dissatisfied with the service?									
TYPE OF SERVICE AVAILED READ EACH SERVICE TO THE RESPONDENT	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
A. Treatment when ill or injured	1 2 ↓			1 2 ↓			1 2 ↓		
B. Routine Check-ups	1 2 ↓			1 2 ↓			1 2 ↓		
C. Laboratory Services	1 2 ↓			1 2 ↓					
D. Immunization	1 2 ↓			1 2 ↓			1 2 ↓		
E. Family Planning	1 2 ↓			1 2 ↓			1 2 ↓		
F. Health and Nutrition Education	1 2 ↓			1 2 ↓			1 2 ↓		
G. Prenatal, Delivery and Postnatal	1 2 ↓			1 2 ↓			1 2 ↓		
H. Others _____ (SPECIFY)	1 2			1 2			1 2		

\*CODES FOR REASONS FOR SATISFACTION/DISSATISFACTION (DO NOT READ TO RESPONDENT)

- AVAILABILITY OF MEDICINE ..... A
- POTENCY/EFFECTIVITY OF MEDICINES GIVEN ..... B
- ADEQUACY OF HEALTH EQUIPMENT AND OTHER FACILITIES ..... C
- AVAILABILITY AND ACCESSABILITY OF HEALTH PERSONNEL ..... D
- HEALTH PERSONNEL APPROACHABILITY ..... E
- TECHNICAL COMPETENCY OF HEALTH PERSONNEL ..... F
- COURTEOUSNESS OF HEALTH CARE FACILITY STAFF ..... G
- CHARGES FOR SERVICES OR MEDICINES ..... H
- IMPORTANCE GIVEN TO PATIENTS' RIGHT IN HEALTH CARE ..... I
- AVAILABILITY/QUALITY OF LINENS/BEDDINGS ..... J
- AVAILABILITY /QUALITY OF FOOD ..... K
- AVAILABILITY OF SERVICE ..... L
- OTHERS, SPECIFY \_\_\_\_\_ X

**SECTION B. HEALTH FACILITY UTILIZATION**

		Private Hospital			Private Clinic			Others, Specify		
		1 2 → SKIP TO NEXT FACILITY			1 2 → SKIP TO NEXT FACILITY			1 2 → GO TO SECTION C		
3	FOR COL. 19,22,25, ASK: When you visited (FACILITY) what type of service did you utilize?	SERVICE AVAILED  SATIS-FIED ...1  DIS-SATIS-FIED ...2	SATIS-FIED/DIS-SATIS-FIED  SATIS-FIED ...1  DIS-SATIS-FIED ...2	REASONS*	SERVICE AVAILED	SATIS-FIED/DIS-SATIS-FIED  SATIS-FIED ...1  DIS-SATIS-FIED ...2	REASONS*	SERVICE AVAILED	SATIS-FIED/DIS-SATIS-FIED  SATIS-FIED ...1  DIS-SATIS-FIED ...2	REASONS*
4	FOR COL. 20,23,26, ASK: Were you satisfied or dissatisfied with the service?									
5	FOR COL. 21,24,27, ASK: Why were you satisfied or dissatisfied with the service?									
	TYPE OF SERVICE AVAILED READ EACH SERVICE TO THE RESPONDENT	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
	Treatment when ill or injured	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	B. Routine Check-ups	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	C. Laboratory Services	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	D. Immunization	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	E. Family Planning	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	F. Health and Nutrition Education	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	G. Prenatal, Delivery and Postnatal	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>	1 2 ↓		<input type="checkbox"/> <input type="checkbox"/>
	H. Others (SPECIFY)	1 2		<input type="checkbox"/> <input type="checkbox"/>	1 2		<input type="checkbox"/> <input type="checkbox"/>	1 2		<input type="checkbox"/> <input type="checkbox"/>

\*CODES FOR REASONS FOR SATISFACTION/DISSATISFACTION (DO NOT READ TO RESPONDENT)

- AVAILABILITY OF MEDICINE ..... A
- POTENCY/EFFECTIVITY OF MEDICINES GIVEN ..... B
- ADEQUACY OF HEALTH EQUIPMENT AND OTHER FACILITIES ..... C
- AVAILABILITY AND ACCESSABILITY OF HEALTH PERSONNEL ..... D
- HEALTH PERSONNEL APPROACHABILITY ..... E
- TECHNICAL COMPETENCY OF HEALTH PERSONNEL ..... F
- COURTEOUSNESS OF HEALTH CARE FACILITY STAFF ..... G
- CHARGES FOR SERVICES OR MEDICINES ..... H
- IMPORTANCE GIVEN TO PATIENTS' RIGHT IN HEALTH CARE ..... I
- AVAILABILITY/QUALITY OF LINENS/BEDDINGS ..... J
- AVAILABILITY /QUALITY OF FOOD ..... K
- AVAILABILITY OF SERVICE ..... L
- OTHERS, SPECIFY ..... X

**SECTION C. NONCOMMUNICABLE DISEASES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	<p>How do you keep yourself healthy?</p> <p>PROBE: Anything else?</p>	EXERCISE..... A AVOID EATING TOO MUCH FAT..... B LOW SALT DIET..... C NO SMOKING..... D MODERATE DRINKING..... E MONITOR BLOOD PRESSURE REGULARLY..... F PROPER NUTRITION..... G OTHERS, SPECIFY_____ X NONE..... Y	
2	How many members of your household smoke cigarette?	SPECIFY NUMBER..... (ENTER "0" IF NONE) <input type="checkbox"/>	
3	<p>In your opinion, how does smoking affect the health of all the people in the household?</p> <p>PROBE: Anything else?</p>	CAN CAUSE TB..... A CAN CAUSE LUNG CANCER..... B CAN CAUSE LUNG DISEASE..... C CAN CAUSE HEART DISEASE..... D CAN CAUSE ASTHMA..... E CAN CAUSE ULCER..... F OTHERS, SPECIFY_____ X NO EFFECT..... Y	
4	<p>What signs and symptoms would make you suspect that a person may have cancer?</p> <p>PROBE: Anything else?</p>	LUMP OR MASS IN ANY PART OF THE BODY..... A SORE(WOUND) THAT DOES NOT HEAL..... B SUDDEN WEIGHT LOSS..... C BLEEDING..... D IRREGULAR BOWEL MOVEMENT..... E IRREGULAR URINATION..... F HOARSENESS OF VOICE..... G PERSISTENT PAIN..... H OTHERS, SPECIFY_____ X NONE..... Y DON'T KNOW..... Z	

**SECTION D. COMMUNICABLE DISEASE**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	What do you think is the cause of TB?  PROBE: Anything else?	MICROBES/GERMS/BACTERIA..... INHERITED..... LIFESTYLE..... SMOKING..... ALCOHOL DRINKING..... FATIGUE..... OTHERS, SPECIFY _____ DON'T KNOW CAUSE TB..... DOES NOT KNOW TB.....	A B C D E F X Y Z → 5
2	How long do you think TB should be treated?	ONE MONTH..... TWO MONTHS..... THREE MONTHS..... FOUR MONTHS..... SIX MONTHS..... EIGHT MONTHS..... ONE YEAR OR MORE..... DON'T KNOW.....	1 2 3 4 5 6 7 8
3	Is there a member of your household who is currently taking anti-TB medicines?	YES..... NO..... DON'T KNOW.....	1 2 8 → 5
4	If Yes, where does that person get the anti-TB medicines?  PROBE: Anything else?	HEALTH CENTER..... BUY MEDICINES FROM DRUGSTORE..... N.G.O..... PRIVATE CLINIC/HOSPITAL..... GOVERNMENT HOSPITAL..... OTHERS, SPECIFY _____ DON'T KNOW.....	A B C D E X Z
5	How do you think is leprosy spread?  PROBE: Anything else?	SKIN TO SKIN..... DROPLETS/AIRBORNE..... HEREDITARY..... EXPOSURE TO HOT THEN COLD "PASMA"..... EATING CERTAIN TYPES OF FOOD..... OTHERS, SPECIFY _____ DON'T KNOW MODE OF TRANSMISSION..... DON'T KNOW LEPROSY.....	A B C D E X Y Z → 8
6	Do you think leprosy is curable?	YES..... NO.....	1 2 → 8
7	In your opinion can leprosy patients be treated at home?	YES..... NO.....	1 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
8	Have you heard of "dengue" fever?	YES..... 1 NO..... 2 → 10	
9	What can you do to protect yourself from getting dengue fever?  PROBE: Anything else?	STAY AWAY FROM PEOPLE WITH..... DENGUE..... A REMOVE BREEDING PLACES (STagnant water) OF MOSQUITOES WITHIN SURROUNDINGS..... B TAKE MEDICINES SO AS NOT TO GET SICK..... C USE MOSQUITO NETS..... D WASH HANDS BEFORE EATING..... E ELIMINATE ALL FLIES IN YOUR SURROUNDINGS..... F OTHERS, SPECIFY..... X NONE..... Y DON'T KNOW..... Z	
10	Apart from feeding or cleaning the dog, what do you think is the responsibility of a dog owner?  PROBE: Anything else?	IMMUNIZE DOG..... A RESTRAIN/CONFINE DOG WITHIN THE YARD/HOUSE..... B IN CASE OF DOG BITE, PROVIDE NECESSARY TREATMENT FOR THE VICTIM..... C OTHERS, SPECIFY..... X NONE..... Y	
11	During the last 3 months, was any member of your family bitten by a dog?	YES..... 1 NO..... 2 → SECT. E	
12	What was done to treat the bite?  PROBE: Anything else?	WASHED BITE WOUND WITH SOAP AND WATER..... A APPLIED GARLIC ON SITE OF BITE..... B CONSULTED HEALTH CENTER/ PHYSICIAN..... C SOUGHT AN HERBULARIO..... D IMMEDIATELY KILLED THE DOG..... E OBSERVED THE DOG..... F OTHERS, SPECIFY..... X NOTHING..... Y	

**SECTION E. TRADITIONAL MEDICINES**

There are some locally produced herbs that have medicinal values. I would like to find out if you know some of these.											
1	Are you familiar with (NAME OF HERB) which is used as a medicine?  READ EACH HERBAL MEDICINE TO THE RESPONDENT. ENCIRCLE "1" IF THE RESPONDENT IS FAMILIAR, OTHERWISE ENCIRCLE "2".	Ampalaya*	Ulasimang bato (pansit pansitan)*	La-gundi*	Niyog-niyo-gan*	Sam-bong*	Tsa-ang gubat*	Yerba Buena*	Baya-bas*	Ba-wang*	Aca-puico*
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		YES..1 NO..2 GO TO (2)	YES..1 NO..2 GO TO (3)	YES..1 NO..2 GO TO (4)	YES..1 NO..2 GO TO (5)	YES..1 NO..2 GO TO (6)	YES..1 NO..2 GO TO (7)	YES..1 NO..2 GO TO (8)	YES..1 NO..2 GO TO (9)	YES..1 NO..2 GO TO (10)	YES..1 NO..2 GO TO SECT. F.
2	For what illness or disease do you think (NAME OF HERB) is used?  CIRCLE CODES OF ALL ILLNESSES MENTIONED.	A. HEADACHE	A	A	A	A	A	A	A	A	
		B. FEVER	B	B	B	B	B	B	B	B	B
		C. ABDOMINAL PAIN/DIARRHEA	C	C	C	C	C	C	C	C	C
		D. COUGH/ASTHMA	D	D	D	D	D	D	D	D	D
		E. ASCARIS	E	E	E	E	E	E	E	E	E
		F. DIABETES	F	F	F	F	F	F	F	F	F
		G. GOUTY ARTHRITIS/ RAYUMA	G	G	G	G	G	G	G	G	G
		H. HYPER CHOLESTEROLEMIA	H	H	H	H	H	H	H	H	H
		I. SKIN INFECTION/ CLEANING WOUNDS	I	I	I	I	I	I	I	I	I
		J. DIURETIC/FOR URINARY STONES	J	J	J	J	J	J	J	J	J
		K. OTHERS, SPECIFY	K	K	K	K	K	K	K	K	K
		3	Have you used (NAME OF HERB) during the past 3 months?	YES..1 NO..2	YES..1 NO..2						
YES..1 NO..2 GO TO (2)	YES..1 NO..2 GO TO (3)			YES..1 NO..2 GO TO (4)	YES..1 NO..2 GO TO (5)	YES..1 NO..2 GO TO (6)	YES..1 NO..2 GO TO (7)	YES..1 NO..2 GO TO (8)	YES..1 NO..2 GO TO (9)	YES..1 NO..2 GO TO (10)	YES..1 NO..2 GO TO SECT. F.
YES..1 NO..2 GO TO (2)	YES..1 NO..2 GO TO (3)			YES..1 NO..2 GO TO (4)	YES..1 NO..2 GO TO (5)	YES..1 NO..2 GO TO (6)	YES..1 NO..2 GO TO (7)	YES..1 NO..2 GO TO (8)	YES..1 NO..2 GO TO (9)	YES..1 NO..2 GO TO (10)	YES..1 NO..2 GO TO SECT. F.
4	Do you know if (NAME OF HERB) is endorsed by the DOH?	YES..1 NO..2 GO TO (2)	YES..1 NO..2 GO TO (3)	YES..1 NO..2 GO TO (4)	YES..1 NO..2 GO TO (5)	YES..1 NO..2 GO TO (6)	YES..1 NO..2 GO TO (7)	YES..1 NO..2 GO TO (8)	YES..1 NO..2 GO TO (9)	YES..1 NO..2 GO TO (10)	

\*REFER TO INTERVIEWER'S MANUAL FOR OTHER NAMES OF THESE HERBS.

**SECTION F. HEALTH CARE FINANCING**

1. Are you or any member of your household a member of MEDICARE, Employer-based Health Maintenance Organization (HMO), Private Health Insurance, Community/Cooperative Health Financing Scheme or any Health Insurance Plan?

YES ..... 1 NO ..... 2, END INTERVIEW

FROM NDHS Form 1 Col. (2) and Col. (1)	RESPONDENT NAME: _____ LINE NO.: _____	HOUSEHOLD MEMBER NAME: _____ LINE NO.: _____	HOUSEHOLD MEMBER: NAME: _____ LINE NO.: _____
2. What kind of Health Insurance Plan?  PROBE: Anything else?	MEDICARE ..... A HMO ..... B PRIVATE ..... C COMMUNITY/COOP. .... D OTHERS, SPECIFY — E	MEDICARE ..... A HMO ..... B PRIVATE ..... C COMMUNITY/COOP. .... D OTHERS, SPECIFY — E DON'T KNOW ..... Z (SKIP TO 7) ←	MEDICARE ..... A HMO ..... B PRIVATE ..... C COMMUNITY/COOP. .... D OTHERS, SPECIFY — E DON'T KNOW ..... Z (SKIP TO 7) ←
3. CHECK Q.2	"A" is encircled <input type="checkbox"/>  "A" is not encircled <input type="checkbox"/> (SKIP TO 7) ←	"A" is encircled <input type="checkbox"/>  "A" is not encircled <input type="checkbox"/> (SKIP TO 7) ←	"A" is encircled <input type="checkbox"/>  "A" is not encircled <input type="checkbox"/> (SKIP TO 7) ←
4. <u>Have you</u> (Has any member of your household) or any of <u>your</u> (his/her) dependents utilized MEDICARE benefits within the last 12 months?	YES ..... 1 NO ..... 2 (SKIP TO 7) ←	YES ..... 1 NO ..... 2 (SKIP TO 7) ←	YES ..... 1 NO ..... 2 (SKIP TO 7) ←
5. <u>Were you</u> (Do you think he/she was) satisfied or dissatisfied with the service?	SATISFIED ..... 1 (SKIP TO 7) ← DISSATISFIED ..... 2	SATISFIED ..... 1 (SKIP TO 7) ← DISSATISFIED ..... 2 DON'T KNOW ..... 8 (SKIP TO 7) ←	SATISFIED ..... 1 (SKIP TO 7) ← DISSATISFIED ..... 2 DON'T KNOW ..... 8 (SKIP TO 7) ←
6. Why <u>were you</u> (do you think he/she was ) not satisfied with the service?  PROBE: Anything else?	PROCESSING OF CLAIMS TOO LONG ..... A TOO MANY REQUIREMENTS ..... B LIMITED HOSPITALIZATION/ FINANCIAL BENEFITS .. C BENEFITS CAN'T BE AVAILED OF UNLESS HOSPITALIZED ..... D PREMIUM NOT REFUNDABLE ..... E LACK OF INFORMATION ABOUT MEDICARE ..... F OTHERS ..... X (SPECIFY)	PROCESSING OF CLAIMS TOO LONG ..... A TOO MANY REQUIREMENTS ..... B LIMITED HOSPITALIZATION/ FINANCIAL BENEFITS .. C BENEFITS CAN'T BE AVAILED OF UNLESS HOSPITALIZED ..... D PREMIUM NOT REFUNDABLE ..... E LACK OF INFORMATION ABOUT MEDICARE ..... F OTHERS ..... X (SPECIFY) DON'T KNOW ..... Z	PROCESSING OF CLAIMS TOO LONG ..... A TOO MANY REQUIREMENTS ..... B LIMITED HOSPITALIZATION/ FINANCIAL BENEFITS .. C BENEFITS CAN'T BE AVAILED OF UNLESS HOSPITALIZED ..... D PREMIUM NOT REFUNDABLE ..... E LACK OF INFORMATION ABOUT MEDICARE ..... F OTHERS ..... X (SPECIFY) DON'T KNOW ..... Z
7.	GO TO NEXT HH MEMBER OR IF NO MORE MEMBER END INTERVIEW	GO TO NEXT HH MEMBER OR IF NO MORE MEMBER END INTERVIEW	GO TO NEXT HH MEMBER OR IF NO MORE MEMBER END INTERVIEW