# **Indonesia**

# National Contraceptive Prevalence Survey 1987





National Family Planning Coordinating Board



Demographic and Health Surveys Institute for Resource Development/Westinghouse

# National Indonesia Contraceptive Prevalence Survey 1987

Central Bureau of Statistics
Jakarta, Indonesia
and
National Family Planning Coordinating Board
Jakarta, Indonesia
and
Institute for Resource Development/Westinghouse
Columbia, Maryland USA

January 1989

This report presents the findings of the National Indonesia Contraceptive Prevalence Survey (NICPS). The survey was a collaborative effort between the National Family Planning Coordinating Board, the Central Bureau of Statistics, and the Institute for Research Development (IRD), a subsidiary of Westinghouse Electric Corporation. The survey is part of the worldwide Demographic and Health Surveys (DHS) Program, which is designed to collect data on fertility, family planning, and maternal and child health. Funding for the survey was provided by the U.S. Agency for International Development (Contract No. DPE-3023-C-00-4083-00 through IRD, and Project 497-0327, PIL No.59 through USAID/Jakarta), the United Nations Fund for Population Activities (Project INS/86/PO3), and the Government of Indonesia. Additional information on this survey can be obtained from the Central Bureau of Statistics, Jl. Dr. Sutomo No. 8, P.O. Box 3, Jakarta, Indonesia (Telephone: 372808), or the National Family Planning Coordinating Board, P.O. Box 186, Jakarta, Indonesia (Telephone: 819-1308). Additional information about the DHS Program can be obtained by writing to: DHS Program, IRD/Westinghouse, 8850 Stanford Boulevard, Suite 4000, Columbia, MD 21045, USA (Telephone: 301-290-2800; Telex: 87775; Fax: 301-290-2999).

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#### **FOREWORD**

The National Indonesia Contraceptive Prevalence Survey (NICPS) was a collaborative effort between the Indonesian National Family Planning Coordinating Board (NFPCB), the Institute for Resource Development of Westinghouse and the Central Bureau of Statistics (CBS). The survey was part of an international program in which similar surveys are being implemented in developing countries in Asia, Africa, and Latin America.

The NICPS was carried out from September through December 1987 in 20 of the 27 provinces in the country. Estimates were derived for each province in Java-Bali, and the Outer Islands I and Outer Islands II regions. This geographical classification was made on the basis of the timing of each region's inclusion in the national family planning program. According to the survey design, 93 percent of the total population was represented in the survey.

The Preliminary Report presented highlights of the material covered in the survey, while the current publication provides the reader with more detailed information gathered in NICPS. Further analyses of the data will be released later, each of which will discuss specific issues. Data and analyses coming out of NICPS are expected to enrich sources of information on Indonesian population, particularly those related to family planning and fertility.

Some data presented in the Preliminary Report differ from the findings presented in this publication because of mostly minor changes that occurred during later stages of data processing. Caution should be exercised by readers who wish to study trends over time using NICPS data and data from past censuses and surveys, due to differences in coverage, definition, classification and survey method.

The success of the entire operation was made possible by hard work and dedication of all parties involved. For the active participation of those whose names are too many to be listed here I would like to extend my sincere thanks and appreciation.

Central Bureau of Statistics

Azwar Rasjid
Director General

#### **PREFACE**

This National Indonesian Contraceptive Prevalence Survey is a welcome addition to demographic data sources in Indonesia. It provides us with a complete set of statistics about contraceptive prevalence and method-mix rates, the characteristics, knowledge, and attitudes of contraceptive users, fertility rates, breastfeeding, and infant mortality rates. Given its scope and representativeness, it can stand with census and intercensal survey data to provide social scientists and policymakers with a clear picture about the Indonesian demographic trends in the recent past and likely directions for the future.

The Indonesian economy has advanced rapidly under the New Order government. Over the past year, for example, the Gross National Product rose at a healthy rate of over four percent. This is a continuation of the economic performance the year before, and it comes at a time of rapid diversification and change. Yet the impact of this growth would be diluted if population increase consumed all the gain. Fortunately, as shown by the results of this survey, the efforts of the Indonesian government to head off this potential demographic problem have been successful.

This is not to say that profound challenges do not lie ahead of us. First, the effects of high past population increases are such that the population will continue to grow despite recent fertility declines. The government will thus need to continue its efforts to upgrade education, create job opportunities, contain environmental degradation, and improve the welfare and health of mothers and children. Second, the government is fully committed to turning greater family planning responsibilities over to communities and individuals. This shift toward self-sufficiency will mean substantially greater personal and local control over key demographic matters, a move both exciting and pioneering. The challenge for the National Family Planning Program is to continue to provide reliable, high-quality services to meet the needs of growing numbers of potential contraceptive users under conditions of self-sufficiency.

Having good data sources, such as the National Indonesian Contraceptive Prevalence Survey, to track demographic trends certainly expedites this mission. I would like to thank the National Family Planning Coordinating Board, the Central Bureau of Statistics, and the Institute for Resource Development/Westinghouse for their cooperative efforts in conducting this study. Their dedication and hard work are reflected in the high quality of this information. I would also like to thank the donor agencies, USAID and UNFPA, whose generous financial support made this study possible.

State Minister of Population and Environment

Professor Dr. Emil Salim

#### **PREFACE**

The National Family Planning Coordinating Board (NFPCB) has coordinated the Indonesian family planning program since 1970. Various exercises have evaluated the progress of the program over this time period. These exercises include: the World Fertility Survey conducted in Java and Bali in 1976; the Population Census in 1980; the Indonesian Contraceptive Prevalence Survey conducted in five urban areas-Jakarta, Surabaya, Medan, Semarang, and Ujung Pandang--in 1984; the Intercensal Population Survey in 1985; and the National Social and Economic Survey (SUSENAS) in 1987. In addition, in 1986, the Family Planning and Nutrition Survey was conducted in East Java and Bali and the Variation of Achievement Study was conducted in five provinces in 1987.

However, program managers still need more data related to family planning, such as fertility levels and differentials, level of use of various contraceptive methods, and the extent of use of private sources for methods, in order to support program development in general and especially to assist family planning policymakers in determining the future direction and strategy--both short-term and long-term--in family planning.

I am pleased that the National Indonesian Contraceptive Prevalence Survey, which was carried out by the Indonesian Central Bureau of Statistics with technical assistance from the Demographic and Health Survey Program satisfied most of our needs for more detailed data.

The survey provides past and current staff of the family planning program reasons to be proud, as well as better definition of future goals. The data clearly show that their tireless and continuous efforts to encourage married couples to use contraceptives have contributed to the indisputable decline in fertility.

The data also indicate what still needs to be done. Forty-one percent of married women are currently in need of family planning; they do not want another birth or want to delay their next birth, but they are not using any family planning method. The percentage of long-term method users is already high but still can be made higher. The number of self-reliant users is growing and we want them to be double or triple in the next five years.

Finally, I would like to thank USAID, the UNFPA, the CBS, the Institute for Resource Development, the Steering Committee, and the Office of Programme Development at NFPCB for their contributions to the survey. The relatively short time in conducting and presenting the first country report of the survey is indeed an outstanding achievement.

National Family Planning Coordinating Board

Haryono Suyono, Ph.D. Chairman

#### SUMMARY OF FINDINGS

The National Indonesia Contraceptive Prevalence Survey (NICPS) was conducted from September to December, 1987 to collect data on fertility and family planning. The survey covered 11,884 ever-married women aged 15-49 from 20 provinces that represent 93 percent of the national population. The purpose of the survey was to provide planners and policymakers with data useful in making informed program decisions.

The survey data can also be used to evaluate the efforts of the National Family Planning Program to date, and the picture that emerges is largely one of success. Fertility in Indonesia has been declining rapidly and if young women continue to have children at current rates, they will have an average of 3.3 births in their lifetime. This is far fewer than the average of 5.4 children born to women now at the end of their childbearing years. The survey shows that the decline in fertility holds true for all women, irrespective of residence or education.

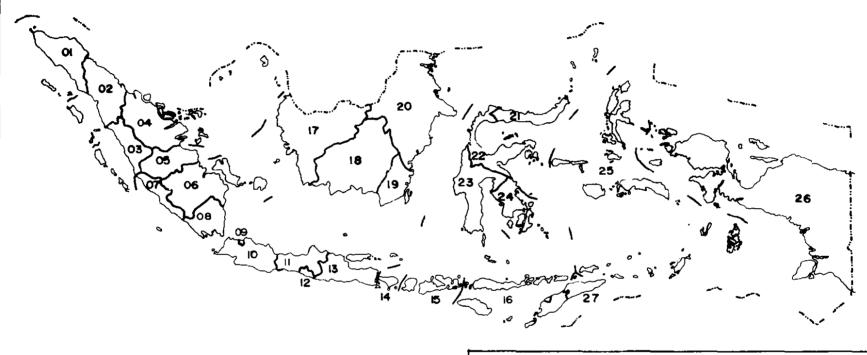
Undoubtedly, the most important determinant of the decline in fertility is the increased use of contraceptives. Survey data indicate that 48 percent of currently married women in Indonesia are using a contraceptive method, 92 percent of which are modern methods, namely, the pill, IUD, and injection. Contraceptive use is higher among urban and better-educated women. It is also higher among women who live in Java and particularly in Bali, where almost 70 percent of the women are practicing contraception. These higher rates in Java-Bali are undoubtedly due to the fact that these two islands are where the government launched its family planning activities. In fact, in the eleven years between 1976 and 1987, contraceptive use in Java-Bali has doubled, from 26 percent to 51 percent of currently married women. In West Java, the rates increased threefold over the same period. Survey data also show that knowledge of modern methods and places to obtain them is nearly universal and that 65 percent of women have ever used a contraceptive method. These findings indicate that a transformation of reproductive behavior has been taking place in Indonesia over the last decade.

Survey data can be used to assess the success of the National Family Planning Program in upholding its principles (Panca Karya). With regard to the goal of encouraging smaller families, data indicate that the two-child norm has taken hold in Indonesia. Forty-three percent of women with two children do not want any more and over half of women with no children or one child say that ideally they would like to have two children. Another program guideline is to encourage the postponement of marriage and childbearing. Survey data indicate trends towards increasing age at first marriage and first birth.

Despite these successes, there is still much to be done. Perhaps because the desire for smaller families has grown, the need for family planning services, either to space or to limit births, is still great. Forty-one percent of married women are currently in need of family planning, that is, they are not using contraception and they either do not want another birth at all or want to delay their next birth for two years or more. Despite high rates of use of effective methods, only about one in five women age 30 or over is using a long-term method. The same proportion of women with three or more children are using long-term methods.

Survey data also document a decline in infant mortality to a rate of about 70 per thousand births for the period 1982-87. Large differences were observed between infant mortality rates for children born after intervals of less than 2 years (109 per thousand) and four or more years (51 per thousand).

#### MAP OF INDONESIA





#### PROVINCE CODE

23. South Sulawesi 24. South East Sulawesi

25. Maluku

v	١.	ULA	eh	12	
0	2.	North	Sumatra	13	

03.West Sumatra

04. Riau

05.Jambi 06. South Sumatra

07. Bengkulu

08 Lampung 09.DKI Jakarta

10 . West Java

11 . Central Java

. D I Yogyakarta

East Java

14 . Bali

15 . West Nusa Tenggara 26. Irian Jaya

16 . East Nusa Tenggara 27. East Timor

17 . West Kalimantan

19 . South Kalimanton 20. East Kolimantan

21. North Sulawesi 22. Central Sulawesi

18 . Central Kalimantan

#### 1. BACKGROUND

#### 1.1 Geography, Climate and History

The Indonesian archipelago lies between Asia and Australia, covering an area of approximately 1.9 million square kilometers. Superimposed on a map of North America, Indonesia stretches from Oregon all the way to Bermuda. Physically, there are five major islands, starting from the west with Sumatra, Java in the south, Kalimantan which straddles the equator, Sulawesi which resembles the letter K, and Irian Jaya to the west of Papua New Guinea. In addition to those, there are more than 13,000 smaller islands, 6,000 of which are inhabited. The large number of islands and their dispersion over a wide area result in diverse cultures and hundreds of ethnic groups with their own languages. This is the basis of the national motto "Unity in Diversity."

Indonesia consists of 27 geopolitical areas called provinces. The next lower administrative units are district or regency/municipality, sub-district, and village. Altogether there are 300 districts, about 3,500 sub-districts and more than 66,000 villages.

All the islands in Indonesia lie in the tropical zone and the surrounding oceans have a moderating impact on the archipelago's temperature and humidity. The climate of each area is determined more by topography, altitude, and precipitation than by latitude. Throughout the year, the Indonesian islands enjoy stable temperatures which range from 25° to 28°C (78°-82°F).

Most of the islands are located in the moist equator region; no month passes without some rainfall. From November through April there is more precipitation, while the months of May through October are considered the "dry season," when the southeast monsoon brings hot, dry air up from Australia.

Since Indonesia proclaimed its independence in 1945, the Republic has experienced several political setbacks. Until late 1949, when the Dutch gave up control over the Indonesian archipelago, there were fights against the ruling democratic republic. Some factions with assistance from the Dutch wanted to form a federation. In some areas, rebellion continued until the early 1960s. The history of the Republic of Indonesia reached a turning point after the aborted coup by the Communist Party in September 1965. In 1966, President Suharto began a new era with the establishment of the New Order government which is oriented toward overall development.

#### 1.2 Economy

Twenty years after its inauguration, the New Order has achieved substantial progress, particularly in stabilizing political and economic conditions in the country. Measured by per capita income, there has been a jump from Rp. 18,230 in 1968 to Rp. 492,886 in 1986. In comparison, the exchange rate for US dollars was Rp. 365 in 1968 and Rp. 1,283 in 1986. In the early 80s, Indonesia enjoyed an accumulation of foreign exchange, as a result of the international oil boom. By 1981, more than 60 percent of the country's foreign exchange came from the sale of oil. The drop in the price of crude oil and natural gas in 1985 forced the government to look for alternatives. This effort seems to be successful. In 1986, income from exports other than crude oil constituted more than half of the total foreign exchange received from exports.

In Indonesia, as in many countries, development programs are implemented in five-year stages. Development plans initially favored strong support for the promotion of agricultural products, then gradually shifted support to the manufacturing and trade sectors. At the moment, the focus of development is placed on manufacturing industries, especially those which produce export commodities. Under the four development plans since 1969, transportation and communication facilities were built which have reduced the disparities that existed between provinces in their ability to benefit from development programs.

Social development closely follows economic progress. The government's policy on this issue is to improve the people's welfare by ensuring the availability of adequate food, clothing and housing. Indonesia's success in achieving self-sufficiency in food is encouraging. The government's efforts in providing mass housing for low-income families are notable. Education and health are areas which have also received considerable attention. Today, almost all children 7-12 years old are in school and immunization programs have covered at least 40 percent of all children under 14 months.

#### 1.3 Population

#### Size and structure

In terms of the size of its population, Indonesia stands fifth in the world after the People's Republic of China, India, the Soviet Union, and the United States of America. Data from the 1985 Intercensal Population Survey (SUPAS), conducted by the Central Bureau of Statistics (CBS), indicate that the total population of Indonesia is 164 million, and that it is growing at a rate of 2.2 percent annually. At this rate, the population of Indonesia will be 216 million in the year 2000.

The Indonesian population has some distinct characteristics. It is unevenly distributed among islands/provinces, and birth and death rates are high in comparison with neighboring ASEAN countries. The 1985 SUPAS data indicate that the population density at the national level is 85 persons per square kilometer. This figure varies across regions—not only among islands, but also among provinces in the same island. For example, Jakarta, the seat of government, has a density of over 13,500 persons per square kilometer which is more than 20 times the density of other provinces in Java such as West Java and East Java. Comparison among islands shows that density ranges from 755 persons per square kilometer in Java to 3 persons per square kilometer in Irian Jaya.

#### **Fertility**

The 1985 SUPAS data indicated a total fertility rate (TFR) of 4.1 children per woman for the period 1981-1984. Results of the 1971 Population Census show that the TFR was 5.6 in the mid-60s. Thus, in less than 15 years there has been a decline of 28 percent. Fertility rates vary by region. In general, the rates in Java are lowest, and in Sumatra highest. There is considerable variation in fertility among provinces in Java, from a high of 4.3 in West Java to a low of 2.9 in Yogyakarta. The highest fertility in Indonesia (5.7 per woman) occurs in the province of Nusa Tenggara Barat. It is interesting to note that this province also has the highest infant mortality rate in the country.

#### Mortality

While mortality rates in Indonesia, particularly of infants and children, remain relatively high, data from the 1971 and 1980 Population Censuses demonstrate that there has been a significant decline in the level of mortality. Based on the 1971 Population Census, the infant mortality rate was estimated to be 142 deaths per 1000 live births. This figure dropped to 112, according to the 1980 Census, and declined to 71 per 1000 live births in 1985. The decline no doubt reflects efforts in the field of health promotion, particularly those specially designed to reduce infant and child mortality through integrated health and family planning services.

#### Internal migration

In an effort to bring about a more equitable population distribution, the government has sponsored a transmigration program to move people from densely populated areas to less populated ones. This program was initiated by the government of Indonesia in the 1950s after independence, but did not gain momentum until 20 years later, when, under the third development plan (Repelita) 500,000 families were resettled in islands outside Java. However, people continue to be attracted to Java which offers better employment opportunities as well as education and health facilities, and government-sponsored transmigration out of Java is offset by a counter-stream of migrants into Java.

#### Education

In the past 15 years, the Indonesian educational system has undergone major improvements. The 1985 SUPAS data show that the literacy rate of persons 10 years and over was 88 percent for males and 74 percent for females. The percentage of persons who never attended school has declined, and the number of graduates at all levels of education has increased. The percentage of primary school graduates climbed from 21 percent in 1980 to 27 percent in 1985, whereas persons who completed junior high school and higher increased from 11 to 16 percent during the same period. At all levels the improvement in female education has been greater than for males.

One possible effect of the improvement in female education is the rise in the age at first marriage. Data from the 1985 SUPAS show that the average age at first marriage of Indonesian women increased from 20.0 in 1980 to 21.2 in 1985. Another probable effect of more widespread education is the increase in labor force participation among females, particularly those 20 years and over. While the female labor force participation rate in 1980 was 32.4 percent, it had climbed to 37.6 percent by 1985. This trend is expected to continue.

#### 1.4 Population and Family Planning Policies and Programs

The government of Indonesia has devoted many of its development programs to population-related issues since President Suharto joined other Heads of State in signing the Declaration of the World Leaders in 1969. In this Declaration, rapid population growth was considered an obstacle to economic development.

Family planning activities were initiated in Indonesia in 1956 by a private organization, working under the auspices of the International Planned Parenthood Federation. It provided birth control advice and services, as well as maternal and child care. In 1968, the government established a National Family Planning Institute, which two years later was reorganized as the National Family Planning Coordinating Board (NFPCB). Since the NFPCB is a non-departmental body, the Chairman reports directly to the President. Thus, the government has made a strong political commitment to family planning and works with religious and community leaders to develop programs to promote family planning.

These programs were not initiated simultaneously throughout the country. In the first five-year development plan (Repelita) which covered the period 1969/1970 to 1973/1974, programs began in the six provinces of Java and Bali. In the next five-year plan, the program was expanded to the provinces of D.I. Aceh, North Sumatra, West Sumatra, South Sumatra, Lampung, Nusa Tenggara Barat, West Kalimantan, South Kalimantan, North Sulawesi, and South Sulawesi. In the development of the family planning program, these provinces are classified as the "Outer Java-Bali I Region." In the third Repelita, the programs were further expanded to include the rest of the provinces which are grouped as the "Outer Java-Bali II Region."

The goals of the program according to the Broad Guidelines for State Policy are: to reduce the birth rate, to establish the small family norm, and to improve the health of mothers and children. To achieve these goals, the family planning program has defined three dimensions: program extension, program maintenance, and program institutionalization. Program extension involves increasing the number of acceptors; it is conducted through the information, education, and communication (IEC) activities throughout the country, that are implemented particularly by community organizations and religious leaders at the village level. Program maintenance involves stabilizing the acceptance of family planning and improving the quality of services; it is implemented by expanding the involvement of people in running family planning programs and its success is measured by the number of acceptors of more effective, long-term methods. Program institutionalization is achieved by the acceptance of the small family norm and the greater participation of government, community and private institutions in managing the program.

The policy to achieve the goals of the family planning program has been established in the "Panca Karya," the five principles or targets. They are:

- 1) Women under the age of 30 and those with fewer than two children should plan a maximum of two children; women should delay their first birth to age 20 by postponing marriage and planning births.
- Women over age 30 and those with three or more children should plan to have no more children and should be offerred the most effective means of fertility regulation.
- Young people should be encouraged to postpone marriage and childbearing through the creation of programs that deemphasize marriage and children as the only means of providing recognition and personal security.
- In areas with higher rates of contraceptive use, education, basic health services and income generating activities are needed to institutionalize the social benefits of family planning.
- 5) Communities should be assisted in assuming responsibility for care of the aged, so as to reduce the desire for many children for security in old age.

Lately, the program has been shifted toward the establishment of a family planning movement. As the program develops, various activities are carried out in cooperation with other government agencies, forming an integrated effort.

#### 1.5 Health Policies and Programs

A National Health System was developed in 1982 which provides overall policy for the health sector until the year 2000. The system has established targets to be achieved in the remaining years of the century. They are stated in terms of life expectancy, infant mortality, birth weight, eradication of infectious diseases, immunization, and other health measures. Various programs were initiated to encourage active community involvement. They are primarily directed toward reducing the mortality of children under age five through intensified efforts in immunization, reduction of diarrheal diseases, improvement of nutrition, delivery of family planning services, and provision of maternal/child health services.

#### 1.6 Objectives of the National Indonesian Contraceptive Prevalence Survey

In 1984 the U.S. Agency for International Development (USAID) initiated the Demographic and Health Survey (DHS) program. The Institute for Resource Development which is part of the Westinghouse Electric Corporation was selected to coordinate the world-wide project, which involves conducting surveys in over 25 developing countries in five years.

The DHS is intended to serve as a primary source for international population and health information for policymakers and for the research community. In general, DHS has four objectives:

- To provide participating countries with a database and analysis useful for informed choices,
- To expand the international population and health database,
- To advance survey methodology, and
- To help develop in participating countries technical skills and resources necessary to conduct demographic and health surveys.

Apart from estimating fertility and contraceptive prevalence rates, DHS also covers the topic of child health, which has become the focus of many development programs aimed at improving the quality of life in general. The Indonesian DHS survey did not include health-related questions because this information was collected in the 1987 SUSENAS in more detail and with wider geographic coverage. Hence, the Indonesian DHS was named the "National Indonesian Contraceptive Prevalence Survey" (NICPS).

The 1987 NICPS was specifically designed to meet the following objectives:

- To provide data on the family planning and fertility behavior of the Indonesian population necessary for program organizers and policymakers in evaluating and enhancing the national family planning program, and
- To measure changes in fertility and contraceptive prevalence rates and at the same time study factors which affect the change, such as marriage patterns, urban/rural residence, education, breastfeeding habits, and availability of contraception.

#### 1.7 Survey Organization

At the request of the NFPCB, the Central Bureau of Statistics (CBS) was appointed as the implementing institution for the DHS in Indonesia. Funds to carry out the survey came from four sources, the government of Indonesia, USAID/Jakarta and UNFPA/Jakarta through the NFPCB, and from IRD/Westinghouse directly to CBS. In addition, IRD also provided technical assistance throughout all stages of the survey.

A steering committee was formed to give direction in the implementation of the survey. Members of the steering committee include representatives from various components within NFPCB, related government agencies, and experts in the topics covered by the NICPS. Representatives from USAID/Jakarta and UNFPA/Jakarta serve as ex-officio members of the steering committee. A technical team was established at the CBS. The team's membership includes staff whose responsibilities are associated with population statistics and those whose duties involve survey activities.

The directors of the statistics offices in the provinces were responsible for the technical as well as the administrative aspects of the survey in their area. They were assisted by field coordinators, most of whom were chiefs of the social and population sections in the provincial statistics offices.

The NICPS covered 20 of Indonesia's 27 provinces, omitting the logistically more difficult and less densely populated provinces of Jambi, East Nusa Tenggara, East Timor, Central Kalimantan, East Kalimantan, Maluku, and Irian Jaya. These excluded areas account for less than 7 percent of the total population, but they account for more than two-thirds of the population of the area denoted as "Outer Java-Bali II." The sample was non-self-weighting, and therefore all estimates in this report are based on weighted figures. The sample design is presented in Appendix A.

DHS model questionnaires and manuals were modified to suit the needs of Indonesia and were translated into Bahasa Indonesian. Over 90 female interviewers were trained for 15 days in five training centers during September, 1987 and data collection took place from mid-September to the third week of December. Data from the questionnaires were entered on microcomputers at the CBS headquarters in Jakarta, using the ISSA program, which was specially designed for the DHS project. Details of the methodology and organization of the survey are presented in Appendix A.

#### 1.8 Background Characteristics of the Surveyed Women

The NICPS covered a sample of nearly 15,000 households to interview 11,884 respondents. Respondents for the individual interview were ever-married women aged 15-49. During the data collection, 14,141 out of the 14,227 existing households and 11,884 out of 12,065 eligible women were successfully interviewed. In general, few problems were encountered during interviewing, and the response rate was high--99 percent for households and 99 percent for individual respondents (see Appendix A).

This section of the report presents the distribution of these women by selected demographic and socioeconomic characteristics as well as a comparison with the same information from previous sources as a measure of the NICPS data quality.

Table 1.1 shows that the distribution of the women in the sample fits the pattern established by the 1980 Census and 1985 SUPAS. The decrease in the percent of ever-married women in the younger age groups from 1980 to 1987 is no doubt due to the rising age at marriage. The increase in the proportion urban over time is also evident in Table 1.1.

Table 1.1 Percent distribution of ever-married women 15-49 by selected background characteristics, 1980 Census, 1985 SUPAS, and 1987 NICPS

Background characteristic	1980 Census	1985 SUPAS	1987 NICPS	Weighted number of women NICPS	Unweighted number of women NICPS
Age 15-19	0.7			/	
	8.3 19.3	5.1	5.3	635	547
20-24		18.2	16.8	1998	1932
25-29	18.8	21.7	21.2	2520	2565
30-34	14.2	16.3	17.8	2110	2183
35-39	15.2	14.6	14.2	1690	1712
40-44	13.2	12.6	12.0	1430	1468
45-49	11.0	11.5	12.6	1501	1477
Residence	•				
Urban	20.6	24.1	27.5	3272	4474
Rural	79.4	75.9	72.5	8612	7410
Region					
Java-Bali	71.2	69.9	67.0	7962	8435
Outer Java-Bali !	25.4	26.4	28.9	3430	2379
Outer Java-Bali II*	3.4	3.7	4.1	492	1070
Province					
Jakarta	4.5	4.9	5.1	600	1729
West Java	21.2	21.4	20.2	2405	1654
Central Java	18.7	17.6	17.6	2096	1370
Yogyakarta	1.8	1.7	1.9	226	1059
East Java	23.4	22.7	20.5	2433	1581
Bali	1.6	1.6	1.7	202	1042
Total	100.0	100.0	100.0	11884	11884

<sup>\*</sup> For the NICPS, not representative of entire region.

Sources: 1980 Census-Central Bureau of Statistics, 1983, Series S No. 2, Table 03. 1985 SUPAS-Central Bureau of Statistics, 1987, No. 5, Table 02.

Except for the distribution of women by province/region, the weighted and unweighted numbers for the NICPS seem to be similar. A significant difference is shown by the women's composition by area of residence. This is brought about because some areas are oversampled to yield provincial estimates. For example, in Yogyakarta and Bali, after taking into account the relative contribution of these provinces' population, the weighted number of cases turned out to be one-fourth of the actual number in the sample. Another example is in the Outer Java-Bali II region where more than 1,000 respondents were interviewed to produce fewer than 500 cases in the weighted sample. In this report all data have been weighted to produce a representative sample of the various geographical units.

Table 1.2 shows the distribution of the surveyed women by education and other selected characteristics. In general, more than one-fifth of the women in the NICPS sample did not go to school, 2 out of 5 had only some primary school, 23 percent graduated from primary school with no further education, and 13 percent had secondary or higher education. These numbers vary depending on age group, urban/rural residence, and religion.

Table 1.2 Percent distribution of ever-married women by education, according to selected background characteristics, NICPS, 1987

	Lev		Weighted number			
Background characteristic	None	Some primary	Primary completed	Secondary or more	Total	of women
Age						
15-19	8.1	37.8	44.7	9.4	100.0	635
20-24	12.5	43.0	28.7	15.8	100.0	1998
25-29	17.0	43.5	25.2	14.3	100.0	2520
30-34	19.2	42.3	22.4	16.1	100.0	2110
35-39	24.7	40.4	21.3	13.6	100.0	1690
40-44	35.3	35.7	19.1	9.9	100.0	1430
45-49	46.8	33.7	12.1	7.3	100.0	1501
Res i dence						
Urban	12.4	32.1	26.0	29.5	100.0	3272
Rural	27.3	43.4	22.4	6.9	100.0	8612
Region						
Java-Bali	23.4	38.5	25.0	13.1	100.0	7962
Outer Java-Bali I	24.1	45.3	18.5	12.1	100.0	3430
Outer Java-Bali II	14.3	34.9	30.2	20.6	100.0	492
Province						
Jakarta	11.9	23.0	28.3	36.7	100.0	600
West Java	18.0	44.4	27.7	9.9	100.0	2405
Central Java	23.7	39.4	24.9	12.0	100.0	2096
Yogyakarta	24.6	32.1	22.8	20.5	100.0	226
East Java	29.8	37.0	22.1	11.1	100.0	2433
Bali	40.8	29.1	22.3	7.7	100.0	202
Religion						
Muslim	23.9	41.3	23.2	11.6	100.0	10966
Protestant	6.2	25.1	27.6	41.0	100.0	403
Catholic	2.8	22.0	27.8	47.4	100.0	143
Hindu	40.1	32.2	20.4	7.3	100.0	227
Buddh i s t	13.2	33.6	25.9	27.3	100.0	120
Other	21.4	61.8	4.5	12.3	100.0	25
Total	23.2	40.3	23.4	13.1	100.0	11884

The first panel of the table demonstrates an inverse relationship between age and education-evidence of the improvement in the educational attainment of women. Young women have received more education than older women. This is denoted by the high percentage of young women who have primary education or higher, and the high percentage of older women who have no education.

Women who reside in urban areas have considerably higher education than those living in rural areas. Although the percentages of women who completed only primary education are similar, in the urban areas the percentage of women who never attended school is much lower, and that of women who finished secondary school is more than four times as high as in the rural areas.

Variation among provinces deserves some comment. Of the areas covered in the survey, Jakarta, the seat of the government, has the highest level of educational attainment, whereas Bali has the lowest. In Bali, 41 percent of the women in the sample did not go to school, and only 30 percent completed primary school. The NICPS data show that educational achievement of women in Outer Java-Bali II is highest among all major regions--only 14 percent of women never attended school, 51 percent completed primary school, and 21 percent graduated from secondary school. This is contrary to expectations, but it should be pointed out that, due to the sampling design, the results do not reflect the entire Outer Java-Bali II region.

The composition of the women by educational attainment and religious affiliation is presented in the last panel of Table 1.2. Almost all (92 percent) of respondents are Muslim. Overall, Christian women are better educated than women of other religions. Hindu women, most of whom reside on the island of Bali, are similarly distributed across the educational levels as the Balinese women.

#### 1.9 Exposure to Mass Media

The survey collected information on the respondents' exposure to mass media in order to study how respondents might be affected by their habits of reading newspapers, watching television, and listening to the radio. Table 1.3 shows that 27 percent of respondents read a newspaper every week, 57 percent watch television every week, and 60 percent listen to the radio every day. The lower percentage of rural respondents who read a newspaper is due to the larger proportion of illiterate women in those areas and perhaps to a lack in printed materials, as well.

Table 1.3 Percent of ever-married women who usually read a newspaper once a week, watch television once a week, or listen to a radio daily by background characteristics, NICPS, 1987

Background characteristic	Read a news- paper weekly	Watch tele- vision weekly	Listen to the radio daily	Number of women
Age				
15 - 19	31.5	59.3	66.6	635
20-24	29.4	59.0	64.3	1998
25-29	29.5	59.5	60.6	2520
30-34	30.2	58.0	60.7	2110
35-39	27.6	55.5	60.3	1690
40-44	22.4	54.0	57.6	1430
45-49	16.1	51.7	54.7	1501
Residence				
Urban	49.4	80.9	70.4	3272
Rural	18.3	47.8	56.6	8612
Region				
Java-Bali	27.0	56.4	61.3	7962
Outer Java-Bali I	25.6	58.7	59.7	<b>3</b> 430
Outer Java-Bali II	33.5	53.1	50.2	492
Province				
Jakarta	63.9	89.8	79.2	600
West Java	32.1	60.2	68.7	2405
Central Java	20.4	54.6	55.6	2096
Yogyakarta	25.1	56.9	64.0	226
East Java	20.2	46.1	54.0	2433
Bali	10.5	53.3	65.3	202
Education	<del> </del>			
None	0.8	32.0	41.9	2760
Some primary	16.3	53.2	58.4	4788
Primary completed	41.9	69.5	70.9	2779
Secondary or more	78.9	89.7	80.6	1557
Total	26.9	56.9	60.4	11884

An inverse relationship between exposure to media and age is apparent in the first panel of Table 1.3. In all columns there is a pattern of modest decline with age in the percentage of women who read a newspaper, watch television, and listen to the radio.

The difference in media exposure between women residing in the urban and rural areas is striking. In the urban areas, half of respondents read a newspaper weekly, 4 out of 5 watch television weekly, and 70 percent listen to the radio daily. The figures for the rural areas are 18 percent, 48 percent, and 57 percent, respectively.

Differences among regions in the proportions of women who usually read a newspaper (between 26 and 34 percent) and watch television (53 to 56 percent) are small, but are somewhat greater for women who listen to the radio (50 percent in Outer Java-Bali II and 61 percent in Java-Bali). Among provinces in Java, the respondents in Jakarta had the widest exposure to mass media. West Java and Yogyakarta follow Jakarta, while Central Java and East Java had almost identical rates, slightly lower than other areas in Java. Women in Bali are about as likely as women in other provinces to watch television and listen to the radio, however only 10 percent of the women read a newspaper weekly. The last panel shows clearly that women with more education tend to have more contact with mass media.

#### 1.10 Ownership of Household Amenities

Table 1.4 presents the respondents' distribution by the household goods they owned or had access to. Overall, almost half have electricity and a bicycle or other non-motor vehicle, and 60 pcrcent have a radio or cassette player. There is a substantial difference between urban and rural areas. Except for bicycles, urban women are more likely than rural women to have the household goods inquired about in the survey. Access to electricity is 2.6 times greater among urban than rural women, radio 1.4 times, television 3.4 times, stove 3.7 times, and motorcycle 2.6 times. As these amenities can be regarded as economic indicators, one may say that urban women tend to be better off than rural women.

Table 1.4 Percent of ever-married women who own or have access to selected household amenities, NICPS 1987

Household amenity	Urban	Rural	Total
Electricity	84.5	32.0	46.4
Radio/cassette player	75.9	54.4	60.4
Television	59.1	17.3	28.8
Stove	81.4	21.9	38.3
Non-motor vehicle	46.4	50.2	49.2
Motor vehicle	33.3	12.6	18.3
Number of women	3272	8612	11884

## 2. MARRIAGE, BREASTFEEDING, AND POSTPARTUM INSUSCEPTIBILITY

Marriage is a primary indicator of exposure of women to the risk of pregnancy, and therefore is important in understanding fertility. Populations in which age at marriage is low tend to be those with early childbearing and high fertility. Therefore, efforts to encourage later marriage often form part of policies to reduce fertility.

In the NICPS, a woman was assumed to be married if she was married by state law, religion, or custom, or was considered to be married by the community. Only women who were 15-49 years of age and who had ever been married were interviewed with the individual questionnaire.

In this report, trends in age at marriage are investigated by comparing the age at marriage of different age cohorts. The chapter also presents measures of several proximate determinants of fertility which influence exposure to pregnancy within marriage--breastfeeding, postpartum amenorrhea, and postpartum sexual abstinence. The joint impact of amenorrhea and abstinence is the length of postpartum insusceptibility, defined as the elapsed time between birth and the resumption of cither menstruation or sexual intercourse.

In this chapter, several tables are based on all women, as opposed to only ever-married women. Since only the latter were interviewed individually, the number of never-married women had to be estimated. The number of never-married women enumerated in the household interview can not simply be added to the number of ever-married respondents to the individual interview, since the latter is subject to some degree of non-response, and the resulting denominator would be biased somewhat. Instead, the ratio of all women to ever-married women enumerated on the household schedule was calculated at each single year of age and for each category of background characteristic (e.g., urban-rural residence, education level). These ratios were then applied to the number of ever-married women interviewed individually so as to expand the denominators to represent all women.

#### 2.1 Marital Status

Table 2.1 shows that among women of childbearing age, 26 percent have not married, 68 percent are currently married, 3 percent are divorced, and 3 percent are widowed. The data by age group indicate that marriage in Indonesia occurs at an early age, with one out of five teenagers and more than three out

Table 2.1 Percent distribution of all women by current marital status, according to age, NICPS, 1987

		Current marital status								
Age	Never married	Married	Divorced	Widowed	Total	number of women				
15-19	81.0	17.9	1.0	0.1	100.0	3342				
20-24	34.8	61.6	3.1	0.4	100.0	3066				
25-29	10.5	85.4	3.2	0.9	100.0	2818				
30-34	4.1	90.0	4.2	1.7	100.0	2200				
35-39	3.0	88.6	3.2	5.2	100.0	1742				
40-44	1.1	87.9	3.4	7.6	100.0	1445				
45-49	1.4	80.1	4.0	14.4	100.0	1523				
Total	26.4	67.6	3.0	3.1	100.0	16136				

Note: The total number of women is derived by weighting each respondent proportionally to the number of never-married women in the same age, education, region, and urban-rural residence group, using data from the household questionnaire.

of five women 20-24 having married. By the time women reach the 25-29 age group, 90 percent have married; this increases to 99 percent for women in their 40s. While the proportion divorced is relatively constant for all age groups, the proportion widowed is lower for younger women and higher for older women, reaching 14 percent of women 45-49 years old.

Table 2.2 presents a comparison of data on proportions ever-married by age from the 1980 Population Census, the 1985 SUPAS, and the 1987 NICPS. The table indicates a regular pattern over time from 1980 to 1987. On the whole, the percentage of never-married women increases continuously from 22 percent in 1980 to 25 percent in 1985 and 26 percent in 1987. Of particular note is the sharp increase in the percentage of never-married women in the younger age groups, especially women 20-24 years; between 1980 and 1987, the percentage of never-married women increased from 22 to 35 percent. This is evidence of increasing age at first marriage, which is supported by other data in this chapter.

Table 2.2 Percent of all women who have never married, according to age, 1980 Census, 1985 SUPAS, and 1987 NICPS

Age	1980 Census	1985 SUPAS	1987 NICPS
15-19	70.0	81.2	81.0
20-24	22.3	29.7	34.8
25-29	7.4	8.9	10.5
30-34	3.4	4.1	4.1
35-39	1.9	2.5	3.0
40-44	1.4	1.7	1.1
45-49	1.2	1.4	1.4
Total	21.5	24.9	26.4

Sources: 1980 Census-Central Bureau of Statistics, 1983, Table 03.3. 1985 SUPAS-Central Bureau of Statistics. 1987, Table 02.3.

#### 2.2 Age at First Marriage

Table 2.3 shows that about 19 percent of women aged 15-49 in Indonesia married before 15 years of age, and nearly half married before 18. It should be noted that, while in some provinces, girls traditionally marry at extremely young ages, not all of them immediately live with their husbands in a household. Some couples stay with their respective parents, often for several years. For example, in the province of Aceh in northern Sumatra, it is customary for the bridegroom to go away as soon as the wedding ceremony is over. Thus, in many cases of very early marriage, there is an interval between marriage and first sexual intercourse.

The percentage of women marrying at younger ages decreases among younger women, implying that age at marriage is increasing. Thus, while 79 percent of women aged 45-49 married before they reached age 20, only 53 percent of women 20-24 have married before reaching 20. Another index of the rising age at marriage is the trend in the median age at marriage which has increased steadily from 16.5 among women 45-49 to 19.6 among women 20-24. Still, the fact that 5 percent of women 15-19 and 12 percent of women 20-24 married before they were 15 is surprising, since the Marriage Law that was put into effect in 1974, sets the minimum age at marriage at 16 years for women and 18 years for men and stipulates that permission from the parents is required for marriages of anyone under 21 years of age.

Table 2.3 Percent distribution of all women by age at first marriage and median age at first marriage, according to current age, NICPS, 1987

			Ag	e at firs	t marriag	e				Median**	
		Never married	Less than 15	15-17	18-19	20-21	22-24	25 or over	Total	Number of women*	age at first marriage
15-19	81.0	4.8	11.0	3.3	-	-	-	100.0	3342	-	
20-24	34.8	11.8	24.9	16.7	8.8	3.0	-	100.0	3066	19.6	
25 - 29	10.5	19.2	30.3	16.2	11.4	8.8	3.6	100.0	2818	18.1	
30-34	4.1	24.8	29.6	15.8	10.4	9.5	5.8	100.0	2200	17.6	
35-39	3.0	28.8	33.7	13.8	8.1	7.0	5.7	100.0	1742	16.8	
40-44	1.1	32.1	34.9	13.5	7.5	6.6	4.3	100.0	1445	16.4	
45-49	1.4	31.8	31.7	15.7	8.5	6.0	4.8	100.0	1523	16.5	
Total	26.4	18.9	26.1	13.0	7.4	5.3	2.9	100.0	16136	-	

<sup>-</sup> Omitted due to censoring

Table 2.4 presents the median age at first marriage by selected socioeconomic characteristics of respondents. Only women aged 25-49 are included in this table since the median age at marriage for younger women is influenced by the large proportion that have not yet married.

Table 2.4 Median age at first marriage among all women aged 25-49, by current age and background characteristics, NICPS, 1987

On all and a med						
Background characteristic	25-29	30-34	35-39	40-44	45-49	Total 25-49
Residence						
Urban	20.3	19.1	18.0	17.7	17.7	18.8
Rural	17.3	17.0	16.2	15.9	16.1	16.6
Region						
Jaya-Bali	17.6	17.0	16.3	16.0	16.0	16.5
Outer Java-Bali I	19.3	18.5	17.8	17.0	17.7	17.8
Outer Java-Bali !!	19.2	18.8	17.9	17.8	17.3	18.3
Province						
Jakarta	20.6	19.6	19.5	18.9	18.0	19.0
West Java	16.8	16.1	15.8	15.3	15.7	15.9
Central Java	17.9	17.5	16.7	16.2	16.4	16.9
Yogyakarta	20.3	19.6	19.2	18.6	19.0	19.0
East Java	16.9	16.0	15.5	15.5	15.2	15.7
Bali	19.7	19.0	19.5	19.3	20.6	19.2
Education		···.				
None	17.1	15.9	15.8	15.7	15.7	15.8
Some primary	16.9	16.5	16.0	15.8	16.1	16.2
Primary completed	18.2	17.7	17.0	17.1	17.4	17.5
Secondary or more	23.3	21.8	22.2	20.8	21.0	21.3
Total	18.1	17.6	16.8	16.4	16.5	-

Note: Median age at first marriage is defined as the exact age by which 50 percent of women have experienced marriage.

Omitted due to censoring

<sup>\*</sup> See note at Table 2.1

<sup>\*\*</sup> Defined in this table as the exact age by which 50 percent of women have experienced marriage.

The data show that women in urban areas generally marry two years later than women in rural areas. While younger women in both urban and rural areas are getting married later than older women did, the change is more pronounced among urban women. For example, while the difference in the median ages at marriage between urban and rural women is 1.6 years for women aged 45-49, the difference is 3 years among women aged 25-29.

Comparison between major regions and provinces also provides interesting results. Surprisingly, women in Outer Islands II marry later (18.3) than women in Outer Islands I (17.8), who in turn, marry later than women in Java-Bali (16.5). It appears that age at marriage has been increasing comparably in all three regions.

As has been well documented, the median age at marriage in West Java is relatively low (15.9). However, it is surprising that East Java has the lowest median age among the six provinces (15.7). When the comparison is made across cohorts, East Java still has the lowest median age at marriage in almost every age group. Bali, Yogyakarta and Jakarta have the highest median ages at marriage. It is interesting to note the fluctuations in median age at marriage across age groups in Bali, where the highest median age is found in the oldest cohort (20.6). This result deserves further investigation to find out if it is caused by a real change in the pattern of marriage or is simply the effect of memory lapse and/or different calendar systems used among cohorts.

The strongest differentials in age at marriage are by education. As Table 2.4 demonstrates, the higher the level of education, the higher the median age at marriage, and the pattern is remarkably consistent across cohorts. The differences in median age at marriage between women with no education, those with some primary school, and those who completed primary school are considerably smaller than the difference between these women and those with secondary education. This implies that to have a major impact on age at marriage, women need to have at least a secondary school education.

#### 2.3 Factors Affecting Exposure to the Risk of Pregnancy

This section presents data regarding breastfeeding, postpartum amenorrhea, and postpartum sexual abstinence. The purpose of describing these three birth-related variables is to estimate the proportion of women who are exposed to the risk of getting pregnant.

Table 2.5 shows that not only are almost all Indonesian babies breastfed, but they are breastfed for a relatively long period of time. Almost 80 percent of babies are still being breastfed by the time they reach their first birthday, and 40 percent are breastfed for two years. The median duration of breastfeeding is 22 months.

As expected, almost all mothers experience postpartum amenorrhea until the second month after birth. The proportion drops considerably by the fourth month after birth and reaches 35 percent among mothers who delivered twelve months before the survey. The median duration of amenorrhea is 9 months. There is a clear relationship between breastfeeding and amenorrhea. For both variables, as the age of the baby increases, the proportion of women breastfeeding and amenorrheic decreases (with some fluctuation), but the decrease is faster in the proportion of women experiencing amenorrhea. This is no doubt due to the fact that duration of amenorrhea is related to the intensity of breastfeeding.

The proportions of women practicing sexual abstinence after a birth decrease even faster than for those breastfeeding and amenorrheic. Less than half of mothers are still abstaining 2-3 months after a birth and the median duration is only 2 months, considerably lower than for breastfeeding or amenorrhea. This probably reflects the Islamic custom of observing sexual abstinence for 40 days following birth.

Table 2.5 also provides information about the proportion of mothers who are insusceptible to pregnancy either because they have not had their period since their last birth or because they are practicing sexual abstinence. The table shows that up to nine months after giving birth, more than 50 percent of

Table 2.5 Percent of births in the last 36 months whose mothers are still breastfeeding, postpartum amenorrheic, abstaining, and insusceptible to pregnancy, by months since birth, NICPS, 1987

Months	Still	Still	Still	Still	Number
since	breast-	amen-	abstain-	insus-	of
birth	feeding	orrheic	ing	ceptible*	births
Less than 2 2-3 4-5 6-7 8-9 10-11 12-13 14-15 16-17 18-19 20-21 22-23 24-25 26-27 28-29 30-31 32-33	88.2 95.2 90.6 86.9 89.3 81.9 78.7 74.6 72.9 71.0 60.8 50.9 39.7 38.9 33.5 33.5	93.9 82.2 66.6 63.7 53.6 39.1 35.7 31.5 23.0 15.4 11.0 6.2 5.8 3.6 3.2 3.4 2.5	88.6 46.2 19.6 21.1 10.8 10.1 9.7 8.6 5.3 6.6 3.2 2.0 3.3 4.0 3.7 5.1	95.6 85.2 69.8 68.4 54.1 41.8 40.6 33.7 25.2 20.8 13.1 8.6 6.6 6.9 7.6 3.4	225 267 297 270 265 214 249 267 284 272 188 196 293 300 306 243 251
34-35	23.6	2.7	2.4	4.5	265
Total	62.8	30.1	13.6	32.9	4652
Median**	22.0	9.2	2.3	9.4	

- \* Either amenorrheic or abstaining
- \*\* Calculated from the distribution by single months

mothers are still insusceptible. The proportion of mothers who are insusceptible drops off rapidly, and at two years after birth, less than 10 percent of mothers are insusceptible.

Table 2.6 provides estimates of the mean duration in months of breastfeeding, postpartum amenorrhea and postpartum abstinence by selected background characteristics. These estimates were calculated using the "current status" or "prevalence/incidence" method, borrowed from epidemiology. Thus, the duration of breastfeeding is defined here as the prevalence (number of women breastfeeding at the time of the survey), divided by the incidence (average number of births per month over the last 36 months).

There is no clear trend in breastfeeding durations by age of mother, which is encouraging in itself, since a decrease in the duration of postpartum insusceptibility among younger women--which is commonly found in developing countries--would put a greater burden on the family planning program to compensate for the increased risk of unwanted pregnancies and short birth intervals. Comparison between rural and urban women provides results which are consistent with previous findings in Indonesia, namely, that rural women tend to have longer periods of breastfeeding, postpartum amenorrhea, and abstinence than urban women.

Variations among provinces and regions are also interesting. Jakarta, which is totally urban has the shortest length of breastfeeding and amenorrhea. Jakarta also has a short period of abstinence, but West Java and Bali have even shorter durations of abstinence. As reported by other researchers (e.g., Singarimbun and Manning), the length of postpartum abstinence is relatively high in provinces where the Javanese ethnic group predominates (Central Java, East Java, and Yogyakarta). In these areas, couples refrain from sexual intercourse, which is traditionally believed to spoil the milk from the mother's breast.

Level of education seems to have a negative relationship with these four postpartum-related variables--the higher the education, the shorter the durations of breastfeeding, amenorrhea, abstinence and insusceptibility. There are some plausible explanations for this relationship. Women with higher education tend to have occupations in the formal sector with regular working hours that force them to be away from home and unable to breastfeed their children regularly. These women also tend not to observe cultural taboos related to sexual abstinence after birth. They prefer using modern contraceptives rather than prolonged breastfeeding to protect them from pregnancy.

Table 2.6 Mean number of months of breastfeeding, postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility, by background characteristics, NICPS, 1987

Background characteristic	Still breast- feeding	Still amen- orrheic	Still abstain- ing	Still insus- ceptible*	Number of births
Age					
Less than 20	26.3	12.8	8.0	14.6	292
20-29	24.2	10.8	4.9	12.2	2844
30 or over	26.7	10.9	5.7	12.6	1582
Residence					
Urban	21.3	9.4	4.3	10.6	1278
Rural	26.6	11.5	5.7	13.2	3440
Region		**			
Java-Bali	26.7	11.8	6.1	13.8	2766
Outer Java-Bali i	23.2	9.9	4.3	10.6	1683
Outer Java-Balî II	21.3	8.4	4.0	10.1	269
Province			<u> </u>		
Jakerta	19.0	7.2	3.4	8.3	228
West Java	25.4	12.0	2.7	12.8	930
Central Java	29.9	13.8	7.2	16.4	793
Yogyakarta	27.3	9.7	11.6	15.4	65
East Java	27.3	11.3	10.0	14.3	684
Bali	25.3	10.4	2.2	10.8	66
Education					
None	28.1	12.1	6.8	14.2	803
Some primary	26.0	11.5	5.4	13.0	2000
Primary completed	25.4	10.8	5.2	12.5	1214
Secondary or more	19.0	8.3	3.7	9.0	701
Total	25.1	11.0	5.3	12.5	4718

Note: The mean number of months is based on current status estimates

Either amenorrheic or abstaining

# 3. KNOWLEDGE AND EVER USE OF FAMILY PLANNING METHODS

#### 3.1 Knowledge of Family Planning

Knowledge of family planning methods and of places to obtain them are crucial elements in the decision of whether and which methods to use. Presumably, a higher level of knowledge of family planning methods will be followed by higher use which ultimately might contribute to reducing fertility rates.

Data on knowledge of family planning methods were obtained by first asking respondents to name the ways that a couple can delay or avoid a pregnancy or birth. If a respondent did not spontaneously mention a particular method, the method was described by the interviewer and the respondent was asked if she recognized the method. Descriptions were included in the questionnaire for eleven methods (pill, IUD, injection, diaphragm/foam/jelly, condom, female sterilization, male sterilization, Norplant, abortion, periodic abstinence (rhythm) and withdrawal). In addition, other methods mentioned by the respondent such as herbs (jamu), abdominal massage (pijat), and prolonged abstinence, were recorded. For any method that she recognized, the respondent was asked if she had ever used it. Finally, for all modern methods that she recognized, she was also asked where she would go to obtain the method if she wanted to use it and what main problem, if any, was associated with using the method. If the respondent recognized periodic abstinence, she was asked where she would go to obtain advice about the method if she wanted to use it.

As Table 3.1 indicates, knowledge of at least one method of family planning is practically universal among married women of reproductive age in Indonesia. Almost identical percentages of ever-married (94 percent) and currently married women (95 percent) recognize at least one method and virtually all of these women recognize at least one modern method.

Knowledge of family planning is very uneven across methods, with three methods widely known and the others much less so. The most widely known methods are the pill, injection, and the IUD, known by 91, 84, and 82 percent of currently married women, respectively. It is interesting that injectables are more widely known than the IUD, even though they were introduced into the Indonesian program later than the IUD. The next most widely known methods are condom and female sterilization, known by 65 and 53 percent of currently married women, respectively. The relatively high level of knowledge of condom deserves mention, considering that it is a male method and respondents were female. A recent social marketing campaign to promote condom use (discussed in more detail below) may have contributed to its widespread recognition. The fact that 30 percent of respondents recognize Norplant is also remarkable, considering that it was introduced less than five years before the survey on a limited basis. Although included on the list of methods read to respondents, only 19 percent of women reported knowing about abortion, which may reflect the fact that it is socially unacceptable and is not a family planning program method in Indonesia. Traditional methods are known by 20 percent of women or less. Knowledge of methods such as herbs, massage and prolonged abstinence would doubtless be higher if these methods had been specifically probed with respondents.

Differences in knowledge of family planning methods by age of the woman are small. The youngest and oldest women are slightly less likely to have heard of methods and this pattern holds true for each method.

Differences in levels of knowledge of at least one modern method are shown in Table 3.2 according to the number of living children a woman has and selected background characteristics. Women with no children are slightly less likely to have heard of modern methods than are women with children.

Table 3.1 Percent of ever-married and currently married women knowing any method, knowing any modern method, and knowing specific family planning methods, by age, NICPS, 1987

Age	Any method	Any modern method	Pill	IUD	Injec- tion	Diaph- ragm/ foam/ jelly	Condom	Female ster- iliza- tion	Male ster- iliza- tion	Nor-	Abor- tion	Period ic ab- stin- ence	With- drawal	absti	Herbs (Ja- mu)	Abdo- minal mass- age	Other	No. of womer
Ever-m	arried W	lomen	,		•			•		-1								
15-19	93.2	93.2	<b>B9.</b> 2	71.9	79.9	2.9	55.6	37.0	16.5	20.3	12.5	10.0	6.5	0.3	8.2	2.7	0.5	635
20-24	96.1	96.1	93.6	84.5	88.4	2.6	67.8	52.4	22.4	31.0	17.8	19.8	13.4	0.7	10.8	4.9	1.5	1998
25-29	96.0	95.9	93.3	85.3	87.1	3.3	69.3	55.5	27.9	34.6	19.7	23.5	17.3	0.8	12.8	5.0	1.4	2520
30-34	95.5	94.7	92.6	84.4	86.4	4.6	68.2	56.4	29.9	33.3	21.8	24.8	17.7	1.2	13.5	5.2	1.7	2110
35-39	94.6	94.1	90.8	82.5	84.1	4.8	66.1	53.1	29.7	31.7	21.7	23.9	16.4	0.7	14.0	5.6	2.1	1690
40-44	90.2	89.1	86.3	76.9	77.2	3.8	57.6	48.7	25.2	23.1	15.4	18.3	13.8	1.5	12.5	6.4	1.5	1430
45-49	86.5	85.3	79.7	70.8	70.4	4.1	51.0	42.5	21.5	18.7	13.6	14.5	10.0	0.9	12.1	4.9	2.1	1501
Total	93.7	93.1	90.1	81.1	83.1	3.8	63.9	51.3	25 <b>.8</b>	29.2	18.4	20.7	14.7	0.9	12.4	5.1	1.6	11884
Currer	tly Mari	ried Won	nen	·	•	•	•			·		·		•				
15 - 19	93.4	93.4	89.1	71.5	80.2	3.1	56.1	36.9	16.0	20.0	12.7	10.0	6.6	0.4	8.3	2.9	0.6	600
20-24	96.9	96.8	94.2	85.1	89.5	2.8	68.2	53.4	22.5	31.6	18.2	20.0	14.0	0.7	10.9	5.2	1.5	1888
25-29	96.4	96.4	93.8	85.7	87.7	3.4	69.7	55.8	28.1	35.0	19.7	23.7	17.8	0.8	12.8	5.2	1.5	2406
30-34	95.7	95.0	92.8	85.3	87.1	4.9	69.0	57.5	30.4	33.8	22.3	25.4	18.2	1.2	13.6	5.4	1.8	1979
35-39	95.3	95.0	91.9	84.2	85.5	5.0	67.6	54.8	31.0	32.7	22.3	25.2	17.2	0.7	13.9	5.5	2.0	1543
40-44	91.9	90.8	87.8	78.5	78.0	4.1	58.9	49.9	25.9	23.9	16.2	19.6	14.4	1.7	12.7	6.5	1.7	1271
45-49	88.2	87.3	81.5	73.9	73.2	4.8	53.3	44.5	23.2	19.2	14.3	14.8	11.0	1.0	12.1	5.3	2.4	1220
Total	94.6	94.2	91.1	82.4	84.4	4.0	65.2	52.5	26.5	30.0	18,9	21.4	15.4	0.9	12.4	5.3	1.7	10907

Table 3.2 Percent of currently married women knowing at least one modern family planning method, by number of living children and background characteristics, NICPS, 1987

Parkagened			Number	of livin	ng child	Number of living children								
Background characteristic	None	1	2	3	4	5	6+	Total						
Residence														
Urban	93.5	96.7	97.9	98.5	97.9	98.4	98.1	97.5						
Rural	86.9	93.6	94.7	94.4	94.5	91.4	91.5	92.9						
Region							-							
Java-Bali	89.4	95.9	96.4	97.2	95.5	95.4	95.6	95.4						
Outer Java-Bali I	85.6	89.6	93.3	91.6	96.0	90.5	90.9	91.5						
Outer Java-Bali II	90.0	94.2	94.5	95.2	93.5	90.3	90.0	92.9						
Province														
Jakerte	97.7	98.5	99.3	98.7	97.6	97.7	98.7	98.5						
West Java	97.7	98.4	98.3	99.3	97.4	97.2	97.3	98.1						
Central Java	91.8	97.6	98.0	99.1	96.3	99.0	98.7	97.5						
Yogyakarta	97.7	99.6	99.3	100.0	100.0	98.9	98.9	99.4						
East Java	78.3	91.6	92.3	92.7	91.3	85.8	87.7	89.7						
Bali	83.4	97.7	98.8	97.5	95.8	93.5	98.5	96.7						
Education			· · · · · · · · · · · · · · · · · · ·											
None	68.1	80.3	85.7	83.6	85.7	83.8	86.4	82.9						
Some primary	89.8	94.9	95.9	98.1	98.3	95.1	94.6	95.6						
Primary completed	95.4	<b>99.</b> 0	99.9	98.2	100.0	99.6	99.5	98.9						
Secondary or more	99.9	100.0	100.0	100.0	99.5	100.0	98.5	99.8						
Total	88.6	94.4	95.5	95.6	95.5	93.4	93.3	94.2						

More women in urban areas know about modern family planning methods than women in rural areas, although the difference is not large (98 vs. 93 percent). Regional differences in knowledge are also small. Ninety-five percent of married women in Java-Bali have heard of at least one modern method of family planning, compared to 92 percent of women in Outer Java-Bali I and 93 percent of women in Outer Java-Bali II. With the exception of East Java, where only 90 percent of women know about a modern method, knowledge levels in the provinces of Java-Bali are all 97 percent or higher. Education has the strongest relationship with knowledge levels. While only 83 percent of women with no education have heard of a modern method, the proportion rises to 96 percent among women with some primary school, 99 percent of women who completed primary school, and almost 100 percent of women with secondary school.

Table 3.3 shows that knowledge of family planning methods has increased dramatically in Indonesia in the last decade. The table compares data on the proportions of ever-married women who know specific family planning methods from the Indonesia Fertility Survey (IFS) conducted in 1976 and the 1987 NICPS. Because the IFS covered only the Java-Bali region, the NICPS data have been limited to that region as well.

The data show that the proportion of women who have heard of any method has increased from 77 percent in 1976 to 95 percent in 1987. While knowledge levels increased for virtually all methods, the largest increase is for female sterilization. In 1976, only 11 percent of women had heard of female sterilization; by 1987, that proportion had increased to 57 percent, a five-fold increase. Almost as dramatic is the increase in knowledge of injection, from 17 to 84 percent.

From April-August 1986, a social marketing campaign for condoms was test marketed in three cities--Bandung in West Java, Medan in North Sumatra, and Surabaya in East Java. In September 1986, the campaign was extended to seven more cities--Jakarta, Semarang and Solo in Central Java, Ujung Pandang in South Sulawesi, Palembang in South Sumatra, Malang in East Java, and Padang in West Sumatra. In order to evaluate the success of early marketing efforts, the NICPS included a question as

Table 3.3 Percent of ever-married women in Java and Bali knowing specific family planning methods, 1976 Indonesia Fertility Survey and 1987 NICPS

	1976	1987
Method	1FS	NICPS
Any method	77	95
Pill	71	91
100	50	82
Injection	17	84
Diaphragm/foam/jelly	4	4
Condom	41	63
Female sterilization	11	57
Male sterilization	8	32
Norplant	-	32
Periodic abstinence	12	20
Withdrawal	7	14
Number of women	9136	7962

Source: Central Bureau of Statistics, 1978, Table 5.2.

to whether respondents had ever heard of DuaLima, the brand name of the condom, and if so, what it was. As Table 3.4 indicates, only 17 percent of ever-married women have heard of DuaLima. Not surprisingly, almost three times as many urban women as rural women have heard of DuaLima, and the proportion is highest (57 percent) in Jakarta. Women who live in areas not targetted by the campaign, such as Yogyakarta, Bali, and Outer Java-Bali II, are far less likely to have heard of DuaLima. Perhaps in part because better educated women are more concentrated in urban areas, knowledge of DuaLima is positively related to the level of education. There does not appear to be much difference in knowledge of DuaLima by either age or number of living children. One encouraging piece of information is that over 90 percent of those women who reported that they had heard of DuaLima correctly identified it as either a condom or family planning method.

Table 3.4 Percent of ever-married women who have ever heard of Dualima by background characteristics, NICPS, 1987

Background characteristic	Percent who have heard of DuaLima
Age	
15-19	17.9
20-24	21.4
25-29	19.3
30-34	18.3
35-39	15.8
40-44	11.4
45-49	7.5
Residence	
Ur <b>ba</b> n	32.8
Rural	10.3
Region	
Java-Bali	17.3
Outer Java-Bali I	16.1
Outer Java-Bali II	6.1
Total	16.5

Background characteristic	Percent who have heard of Dualima
Province	
Jakarta	57.1
West Java	17.9
Central Java	13.7
Yogyakarta	8.8
East Java	12.0
Bali	1.8
Education	
None	3.3
Some primary	10.6
Primary completed	22.2
Secondary or more	47.7
Number of living children	
None	17.6
1	19.3
2	17.3
2 3	16.7
4 or more	13.9

# 3.2 Knowledge of Sources for Family Planning Methods

Before a woman can adopt family planning, she must not only have heard of a method, but also must know of a place to obtain it. Table 3.5 shows that most women who know a method also know where to obtain it. This table suggests that lack of knowledge of sources for methods is probably not a major obstacle to use in Indonesia. If knowledge is a barrier at all, it is the lack of knowledge of certain methods themselves, and not lack of knowledge of sources that is the obstacle to use. As Table 3.6 indicates, knowledge of at least some source for modern methods is widespread among all subgroups.

Table 3.5 Percent of currently married women knowing specific family planning methods and knowing a source for obtaining that method, by method, NICPS, 1987

Method	Know method	Know source
Pill	91.1	88.4
IUD	82.4	76.2
Injection	84.4	81.4
Diaphragm/foam/jelly	4.0	3.1
Condom	65.2	52.3
Female sterilization	52.5	48.7
Male sterilization	26.5	24.2
Norplant	30.0	24.7
Periodic abstinence	21.4	19.7
Number of women	10907	10907

Table 3.6 Percent of currently married women knowing any modern family planning method and knowing a source for obtaining that method, by background characteristics, NICPS, 1987

Background characteristic	Know a modern method	Know a source
Residence Urban Rural	97.5 92.9	96.6 91.2
Region Java-Bali Outer Java-Bali I Outer Java-Bali II	95.4 91.5 92.9	94.1 89.6 91.4
Province Jakarta West Java Central Java Yogyakarta East Java Bali	98.5 98.1 97.5 99.4 89.7 96.7	98.0 96.3 96.7 99.1 88.1 95.8
Education None Some primary Primary completed Secondary or more	82.9 95.6 98.9 99.8	80.1 94.0 98.3 99.6
Total	94.2	92.7

Table 3.7 shows the specific sources where women would get methods if they wanted to use them. For most methods, the large majority of women would use public sources such as hospitals, health centers, and family planning clinics. Private services such as private doctors, midwives, and pharmacies, were mentioned less frequently (generally by 5 to 10 percent of women) than public sources, and represented a significant proportion only for the diaphragm/foam/jelly and condoms (29 and 20 percent, respectively).

Table 3.7 Percent distribution of women knowing a family planning method by supply source they would use if they wanted the method, according to method, NICPS, 1987

				Family	planning	method	kno⊌n		
Supply source named	Pill	IUD	Injec- tion	Diaph- ragm/ foam/ jelly	Condom	Female ster- iliza- tion	Male ster- iliza- tion	Nor- plant	Period ic ab- stin- ence*
FP clinic/hospital/health									
center	50.5	77.1	75.4	44.5	45.6	86.6	83.2	70.4	16.6
FP field worker (PLKB)	7.8	1.4	1.5	1.8	3.1	0.1	0.1	0.4	3.0
FP post (Pos KB)	19.3	3.7	4.2	1.6	6.7	0.1	0.1	0.9	1.8
Mobile clinic (TKBK/TMK)	0.5	0.3	0.1	0.0	0.1	0.0	0.1	0.0	0.1
Safari campaign drive	0.0	0.5	0.2	0.0	0.1	0.0	0.0	0.7	0.4
Integrated service									
post (posyandu)	4.2	1.5	2.5	0.6	2.4	0.1	0.1	0.4	0.8
Pharmacy/shop	1.1	0.0	0,0	13.9	17.7	0.0	0.0	0.0	0.0
Private doctor	1.8	4.0	6.1	12.5	0.6	4.7	6.9	6.8	7.8
Private midwife	2.2	2.8	4.7	2.3	1.3	0.6	0.2	1.1	4.6
Other	9.4	1.1	1.5	1.5	2.4	0.1	0.1	1.6	57.6
Don't know	3.2	7.6	3.8	21.3	20.0	7.7	9.2	17.7	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of women who know method	10705	9633	9873	449	7597	6102	3072	3470	2460

<sup>\*</sup> Refers to source for information about method

In an effort to discover which actual or potential sources of family planning information are acceptable to Indonesian women, the NICPS included a set of questions on this subject, the results of which are presented in Table 3.8. At least three out of four women feel that family planning field workers, private doctors and midwives, village officials, staff of the women's movement (PKK), television, and radio are acceptable sources of family planning information. Far fewer women (about half) find religious leaders, pharmaeists, and teachers acceptable family planning educators. The most widely accepted source is family planning field workers, followed by private midwives.

Generally, women in the middle age groups (25-44), urban and better educated women are somewhat more likely to consider the sources acceptable. Women in Outer Java-Bali II are generally more accepting of sources than women in the other two regions, and women in Yogyakarta, Jakarta and Central Java tend to be more accepting of these sources of family planning information than women in the other provinces in Java-Bali. The acceptability of religious leaders as family planning communicators is particularly low in Bali (20 percent), perhaps due to the influence of Hinduism in this province.

#### 3.3 Dissemination of Family Planning Information

In an effort to identify obstacles to the wider use of family planning methods, NICPS interviewers asked women who reported knowing about a method what they thought was the main problem, if any, with using the method. On the whole, few respondents reported knowing of problems with methods. As shown in Table 3.9, a substantial minority of women (16 to 41 percent) reported "no problem" and an even larger

Table 3.8 Percent of ever-married women who think specific sources of family planning information are acceptable, by background characteristics, NICPS, 1987

Background characteristic	Private Doctor	Private mid- wife	Field- worker (PLKB)	Village Head	Relig- ious leader	Women's move- ment (PKK)	Phar- macist	Teach- er	Tele- vision	Radio	Number of women
Age											
15-19	66.1	72.9	76.8	68.6	49.1	67.6	45.3	46.2	77.0	80.5	635
20-24	75.6	83.2	85.0	74.1	55.7	78.2	51.3	54.0	80.1	82.9	1998
25-29	77.5	83.4	85.5	77.7	59.7	77.5	50.4	55.8	79.8	81.7	2520
30-34	78.1	84.1	85.3	75.6	59.1	77.6	50.9	56.7	80.3	81.8	2110
35-39	73.3	79.8	81.2	74.3	59.9	74.3	49.0	55.3	77.8	80.3	1690
40-44	70.2	75.4	78.9	71.1	57.5	69.9	45.9	55.3	71.8	74.2	1430
45-49	64.9	68.9	73.0	67.2	55.8	67.5	42.5	51.5	68.3	70.1	1501
Residence											
Urban	81.7	85.7	86.8	67.2	57.5	80.5	54.4	53.4	88.4	87.8	3272
Rural	70.6	77.3	80.1	76.1	57.7	72.2	46.4	54.9	72.8	76.1	8612
Region											
Ja∨a-Bali	70.7	77.2	80.8	74.2	59.2	74.8	49.1	54.0	75.7	78.3	7962
Outer Java-Bali I	78.4	83.6	83.0	72.4	54.9	72.8	48.1	55.2	79.8	81.1	3430
Outer Java-Bali II	88.2	91.3	93.4	72.6	49.7	80.2	45.0	56.6	79.8	83.4	492
Province											
Jakarta	89.4	92.3	94.8	57.1	58.2	88.7	51.6	44.5	94.7	94.9	600
West Java	64.2	73.7	76.2	73.4	62.4	70.3	45.3	53.6	76.3	80.0	2405
Central Java	77.9	83.7	92.8	83.2	63.2	84.6	55.5	60.3	78.5	82.5	2096
Yogyakarta	89.6	92.2	95.5	88.1	67.0	87.9	59.6	72.3	84.9	89.7	226
East Java	63.5	69.0	70.4	70.9	55.5	67.8	46.8	51.5	67.2	67.6	2433
Bali	81.5	88.8	77.2	65.7	19.5	56.0	34.1	33.1	76.0	80.2	202
Education											
None	56.8	64.6	66.5	67.0	48.7	56.4	34.1	45.0	56.9	60.5	2760
Some primary	73.9	79.7	81.7	77.4	60.8	75.2	50.7	57.9	75.3	78.3	4788
Primary completed	81.0	88.3	90.2	77.0	59.4	83.9	55.0	56.6	89.1	90.6	2779
Secondary or more	89.4	90.5	95.2	67.8	60.4	87.6	56.5	57.1	96.6	95.7	1557
Total	73.6	79.6	81.9	73.6	57.6	74.5	48.6	54.5	77.1	79.3	11884

proportion (22 to 69 percent) answered "don't know," when asked about problems in using methods. It is likely that many of the women in the latter category should be included in the former, since "don't know" could be interpreted as either that the respondent does not know of any problems (therefore they do not exist--"no problem"), or that she does not know enough about the method to give an answer about problems with it.

Of those reporting perceived problems with methods, "health concerns" is the largest category. One out of three women who know of the pill and roughly one in five women who know of the IUD and injection reported health-related concerns as the main problem with using these methods. Comparatively few women found methods to be ineffective or inconvenient. Ineffectiveness was cited more frequently as a problem for periodic abstinence, the IUD, withdrawal, and condom, than it was for other methods, while inconvenience was mentioned more frequently for periodic abstinence, withdrawal, and condom.

In interpreting the data in Table 3.9, one should keep in mind that the question on perceived problems with methods also measures the depth of knowledge about the methods. It is likely that many women who have heard of a method do not really know much about it and are thus more likely to answer "don't know" to the question. Thus, the larger proportion of women reporting problems for the better-known methods such as pill, IUD and injection may merely reflect the fact that they are better known-not that women think of them as causing more problems than other methods. Furthermore, it appears that respondents think in terms of the more "physical" aspects of problems in using methods, e.g., health

Table 3.9 Percent distribution of ever-married women by main problem perceived in using particular family planning methods, according to method known, NICPS, 1987

	Family planning method known									
Main problem perceived	Pill	1UD	Injec- tion	Diaph- ragm/ foam/ jelly	Condom	Female ster- iliza- tion	Male ster- iliza- tion	Nor- plant	Period ic ab- stin- ence	With- drawa
No problem	41.2	35.6	38.8	15.8	19.2	41.3	37.5	28.5	40.0	33.4
Not effective	1.3	6.6	1.2	2.0	4.8	2.0	0.7	0.6	12.8	5.4
Husband disapproves	0.1	0.5	0.1	0.7	2.3	0.3	0.9	0.0	1.0	6.9
Health concerns	33.4	21.2	23.4	5.3	1.0	5.0	2.8	4.9	0.1	1.2
Access/availability	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.1	0.0	0.0
Costs too much	0.0	0.0	0.4	0.2	0.0	0.5	0.7	0.6	0.0	0.0
Inconvenient	0.6	1.3	0.8	4.1	4.7	0.4	0.9	0.4	6.2	4.6
Religious/moral	0.0	0.1	0.0	0.0	0.1	0.2	0.3	0.3	0.0	0.2
Other	1.2	1.1	2.0	1.3	4.2	2.2	1.5	0.7	2.2	11.3
Don't know	22.0	33.5	33.0	69.2	63.4	47.9	54.5	63.4	37.4	<b>3</b> 5.5
Missing	0.2	0.1	0.1	0.7	0.3	0.2	0.2	0.4	0.3	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women who know method	10705	9633	9873	449	7597	6102	3072	3470	2460	1742

concerns, ineffectiveness, and inconvenience, as opposed to problems of cost, availability, and religious or moral objections. Although it is tempting to conclude that cost, disapproval of husbands, access/availability, and religious objections are not obstacles to contraceptive use in Indonesia, data on reasons for nonuse (see Chapter 5) give a somewhat different picture.

In order to ascertain whether women know which methods are best for limiting or spacing births, the NICPS included two questions: "If a woman wants to delay the next birth, which method do you think would be best for her to use?" and "If a woman has all the children she wants, which method do you think would be best for her to use?" The results are given in Table 3.10.

Table 3.10 Percent distribution of ever-married women by the method they think best to use to delay or limit births, NICPS, 1987

Method	Best for delaying births	Best for limiting births
Pill	30.7	18.7
IUD	21.2	15.1
Injection	20.8	13.8
Condom	1.4	0.8
Female sterilization	0.5	21.9
Male sterilization	0.0	0.7
Norplant	0.7	0.7
Periodic abstinence	1.1	0.4
Withdrawal	1.0	0.6
Prolonged abstinence	0.3	0.4
Herbs (Jamu)	2.2	1.6
Abdominal massage (Pijat)	0.4	0.4
Other	1.0	0.7
Don't know	18.7	24.2
Total	100.0	100.0
Number of women	11884	11884

Most women (70 percent) think that the pill, IUD, or injection is best for spacing births, despite the fact that the program recommends that the IUD be used only when women have all the children they want. Almost one in five women says she doesn't know which method is best for spacing births. While 22 percent of women identify sterilization as a good method for women who do not want more children, substantial proportions say that the pill (19 percent) and injections (14 percent) are best for this purpose. Almost one in four women does not know which method is best for limiting births. It appears that more education about methods appropriate for different circumstances might be useful in Indonesia.

Two types of mass media used to disseminate information about family planning in Indonesia arc radio and television. Programs include spot shows, dramas, reports, discussions, and regular series. Some are aired monthly, while others are periodic.

As shown in Table 3.11, 72 percent of respondents did not hear or see a family planning message on radio or television in the month before the survey. One possible reason for this high percentage is that many family planning messages are inserted into reports on other development activities such as agriculture, health, rural development, and transmigration. Most women who reported having seen or heard a family planning message in the previous month said that they saw or heard a message more than once. Exposure to family planning messages is higher among urban women, and women in Jakarta, Yogyakarta, and West Java. Level of education is directly related to exposure to family planning messages—the higher the education, the greater the likelihood that a woman has heard or seen a message.

Another important means of disseminating family planning information (and providing motivation and services) in Indonesia is the family planning field worker system, which operates in all parts of the country. Field workers focus their efforts on motivating family planning use, providing family planning information and recording service statistics. An important aspect of the field worker's job is

Table 3.11 Percent distribution of ever-married women by the number of times they heard or saw a message about family planning on radio or television in the six months prior to survey, according to background characteristics, NICPS, 1987

	Number of	times hear	d message		Number	
Background characteristic	Never	Once	More than once	Total	of women	
Residence						
Urban	61.0	10.0	29.0	100.0	3272	
Rural	76.7	6.9	16.4	100.0	8612	
Region						
Java-Bali	73.0	8.0	19.0	100.0	7962	
Outer Java-Bali I	70.6	7.0	22.4	100.0	3430	
Outer Java-Bali II	74.5	8.5	17.0	100.0	492	
Province						
Jakarta	54.0	10.5	35.5	100.0	600	
West Java	67.8	10.6	21.6	100.0	2405	
Central Java	73.3	8.9	17.8	100.0	2096	
Yogyakarta	67.9	6.3	25.8	100.0	226	
East Java	82.6	4.5	12.9	100.0	2433	
Bali	76.3	5.5	18.2	100.0	202	
Education						
None	88.0	4.3	7.7	100.0	2760	
Some primary	76.3	7.6	16.1	100.0	4788	
Primary completed	66.0	8.9	25.1	100.0	2779	
Secondary or more	44.0	12.4	43.6	100.0	1557	
Total	72.4	7.7	19.9	100.0	11884	

institutionalization, or working through community organizations such as the mothers' clubs, religious groups, women's movement (PKK), and the organization for wives of civil servants (Dharma Wanita). Through such groups, field workers introduce family planning and maintain motivation by such things as initiating income-generating programs and rewarding long-term users, etc.

As shown in Table 3.12, one out of five currently married women reported that she was visited by someone from the family planning program in the previous six months. Although this appears low, it should be mentioned that field workers are not expected to visit all the women in the areas assigned to them, as the number is too large. The data indicate that field workers visited more than one out of four contraceptive users in the six months before the survey. Since pill and condom users comprise roughly one-third of all users (see Chapter 4), this suggests that field workers are successfully fulfilling their function to support current users. However, only about one in seven nonusers was visited by someone from the program in the previous six months, which implies that field workers are relying on their institutional contacts to fulfill their motivational functions.

The largest differentials in field worker visits occur by place of residence. Women in Java-Bali are almost twice as likely to have been visited by a field worker as women in Outer Java-Bali I or Outer Java-Bali II. Within Java-Bali, Central Java has by far the highest level of field worker visits, with 45 percent

Table 3.12 Percent of currently married women who have been visited by a family planning field worker in the 6 months prior to the survey, by background variables and current contraceptive use status, NICPS, 1987

	Family p	lanning use	status	Number
Background characteristic	Using	Not using	Total	of women
Age		<b>†</b>		
15-19	24.4	13.1	16.0	600
20-24	26.1	18.5	22.1	1888
25-29	25.7	17.6	22.0	2406
30-34	26.9	15.4	22.2	1979
35-39	25.8	16.0	21.4	1543
40-44	27.8	13.7	19.7	1271
45-49	27.4	11.6	15.4	1220
Residence				
Urban	24.9	16.8	21.2	2977
Rural	27.0	15.0	20.4	7930
Region				
Java-Bali	29.9	18.8	24.5	7265
Outer Java-Bali I	17.1	9.7	12.8	3191
Outer Jaya-Bali II	20.0	10.7	14.4	451
Province				
Jakarta	11.1	7.4	9.4	543
West Java	24.6	14.8	19.3	2208
Central Java	51.3	37.7	45.0	1934
Yogyakarta	30.0	20.0	26.8	207
East Java	21.8	10.7	16.3	2182
Bali	11.5	9.6	10.9	191
Education				
None	22.1	10.5	14.3	2406
Some primary	23.8	15.9	19.6	4426
Primary completed	31.8	20.5	26.6	2605
Secondary or more	27.2	17.3	23.6	1470
Total	26.3	15.4	20.6	10907

Table 3.13 Percent of ever-married and currently married women who have ever used specified family planning methods, by age, NICPS, 1987

					Fami	ly plan	ning me	thod ev	er used									
Age	Any method	Any modern method	1	IUD	Injec-	Diaph- ragm/ foam/ jelly	Condom	Female ster- iliza- tion	Male ster- iliza- tion	Nor- plant	Abor- tion	Period ic ab- stin- ence	With- drawal	Prol- onged absti nence		Abdo- minal mass- age	Other	No. of womer
Ever-m	arri <b>ed</b> l	Jonen	•		•	•	•		•	•		<u>'</u>		•				<u> </u>
15-19 20-24 25-29 30-34 35-39 40-44 45-49 Total	35.6 62.0 71.3 72.8 68.4 56.7 40.4	32.7 58.2 67.5 69.9 64.4 52.5 35.5	21.6 32.0 40.0 44.1 40.8 33.4 20.6	5.4 16.2 22.4 26.2 25.0 18.7 14.1	9.7 23.6 24.9 22.9 17.5 10.0 5.4	0.0 0.0 0.2 0.2 0.4 0.1 0.3	0.5 3.3 5.3 8.7 8.7 6.4 5.1	0.0 0.6 1.2 3.6 6.5 4.7 3.9	0.0 0.0 0.1 0.3 0.2 0.3 0.2	0.2 0.4 0.6 0.4 0.5 0.3 0.1	0.0 0.1 0.5 0.5 0.9 0.3 0.4	0.8 2.5 4.5 5.7 5.3 5.2 3.9	2.1 4.2 5.2 5.9 5.8 4.2 2.9	0.3 0.3 0.5 0.7 0.6 0.8 0.7	0.7 2.1 2.7 3.2 3.8 3.3 3.4	0.3 0.6 0.6 0.6 1.4 1.3 1.5	0.0 0.3 0.3 0.4 0.5 0.3 0.6	635 1998 2520 2110 1690 1430 1501
Curren	tly Mar	ried Wo	men							•								
15-19 20-24 25-29 30-34 35-39 40-44 45-49	36.4 63.9 73.1 75.4 71.3 60.8 43.8	33.4 60.3 69.3 72.4 67.3 56.7 39.3	21.7 33.0 41.1 45.6 42.1 36.2 22.8	5.7 16.9 22.8 27.3 26.6 20.3 15.7	10.3 24.3 25.7 23.9 18.9 10.8 6.2	0.0 0.0 0.2 0.2 0.4 0.1	0.5 3.5 5.5 9.2 9.3 7.0 5.9	0.0 0.7 1.2 3.7 6.8 5.1 4.7	0.0 0.0 0.1 0.3 0.2 0.3	0.3 0.4 0.6 0.5 0.6 0.3	0.0 0.1 0.6 0.5 0.9 0.4 0.5	0.9 2.5 4.8 6.0 5.8 5.8 4.1	2.1 4.4 5.5 6.2 6.1 4.5 3.3	0.4 0.3 0.5 0.7 0.6 0.8 0.8	0.7 2.1 2.8 3.2 3.8 3.0 3.1	0.4 0.6 0.7 0.7 1.4 1.5	0.0 0.3 0.3 0.5 0.5 0.7	600 1888 2406 1979 1543 1271 1220
Total	65.0	61.2	37.0	21.1	19.4	0.2	6.3	3.1	0.2	0.4	0.5	4.6	5.0	0.6	2.8	0.9	0.4	1090

of women having been visited; Jakarta with 9 percent and Bali with 11 percent, have the lowest levels. Also, better educated women are somewhat more likely than less educated women to have been visited by a member of the family planning program.

#### 3.4 Ever-Use of Family Planning Methods

For each method that a respondent said she had heard of, she was also asked if she had ever used it. As shown in Table 3.13, 62 percent of ever-married women and 65 percent of currently married women have used some method of family planning. Almost all of those who have used family planning have used a modern method at some time. Reflecting the same pattern as knowledge of methods, the pill is by far the most common method ever used, with 35 percent of ever-married women indicating they have used it. The next most widely used methods are the IUD and injection, with respectively, 20 and 18 percent of ever-married women reporting use. Much smaller proportions of women report having used other methods-condom (6 percent), withdrawal (5 percent), periodic abstinence (4 percent) and female sterilization (3 percent). Less than one percent of ever-married women have used diaphragm, foam, jelly, male sterilization, Norplant, or abortion. Ever-use is highest in the middle age groups for all methods.

Table 3.14 shows the variation in ever use of any method and of any modern method by background characteristics of ever-married women. As expected, ever-use is higher among urban women and women in Java-Bali, where the government program was first introduced. The lack of a difference between women in Outer Java-Bali I and Outer Java-Bali II may be caused by the fact that the survey omitted some of the more logistically difficult provinces in the latter region, which also have presumably lower rates of ever use.

Table 3.14 Percent of ever-married women who have ever used any method, and any modern method by background characteristics, NICPS, 1987

	Percent wh	o ever used:	Number
Background characteristic	Any method	Any modern method	of women
Residence			
Urban	67.1	62.2	3272
Rural	60.1	56.7	8612
Region	1		
Java-Bali	64.8	62.5	7962
Outer Java-Bali I	56.4	49.5	3430
Outer Java-Bali II	55.9	49.8	492
Province			
Jakarta	65.6	61.7	600
West Java	64.7	62.7	2405
Central Java	67.8	66.3	2096
Yogyakarta	79.6	69.0	226
East Java	59.9	57.5	2433
Bali	77.4	76.1	202
Education			
None	44.0	41.7	2760
Some primary	63.5	59.5	4788
Primary completed	69.0	65.4	2779
Secondary or more	77.0	71.1	1557
No. of living children	1		
None	15.6	13.2	1225
1	55.6	51.9	2327
2	71.0	67.8	2420
3	73.0	69.3	1984
4 or more	69.1	64.6	3928
Total	62.0	58.2	11884

The highest level of ever use is in Yogyakarta, where 80 percent of ever-married women have used some method of family planning; Bali shows the highest level of use of any <u>modern</u> method (76 percent). East Java shows the smallest proportion of ever-users, both for any method and for any modern method. As expected, both education and the number of living children have a strong positive correlation with ever use of family planning.

The number of living children at the time of first use of family planning is a useful indicator of the acceptance of the small family norm and of the adoption of family planning for spacing purposes. Table 3.15 presents the percent distribution of ever-married women by the number of living children at the time they first used family planning, according to current age. The data indicate a dramatic shift in the timing of first contraceptive use. Only one percent of ever-married women 45-49 first used when they had no children, compared to 15 percent of women 15-19. The proportion of women who first used when they had no child or one child has increased from 6 percent of women 45-49 to 46 percent of women 20-24. Since most Indonesian women want at least two children (see Chapter 7), those who use contraception before having two children are presumably doing so to space their births. This pattern is indicative of the change from viewing contraceptive use as primarily a means to limit family size to viewing it as a means to space children. The increase in initiation of use with only 2 or 3 living children may also indicate a change towards smaller family norms.

A basic knowledge of the reproductive cycle and the fertile period are important for the successful practice of periodic abstinence. Table 3.16 presents the distribution of all ever-married women and those women who have ever used periodic abstinence by the time during the ovulatory cycle that they think a

Table 3.15 Percent distribution of ever-married women by number of living children at time of first use of family planning, according to current age, NICPS, 1987

	,,	N	umber of	living	· ]		Number of	
Current age	Never - used	None	1	2	3	4+	Total	Women
15-19	64.4	14.8	18.9	1.8	0.1	0.0	100.0	63
20-24	38.0	7.5	38.0	13.3	2.7	0.5	100.0	1998
25-29	28.7	3.7	31.1	21.5	10.5	4.5	100.0	252
30-34	27.2	1.8	19.0	20.4	14.8	16.8	100.0	211
35-39	31.6	1.8	11.9	13.5	14.0	27.2	100.0	169
40-44	43.3	1.0	7.1	8.0	9.1	31.5	100.0	143
45-49	59.6	1.0	5.1	3.2	3.8	27.3	100.0	150
Total	38.0	3.6	20.6	13.8	8.9	15.1	100.0	1188

Table 3.16 Percent distribution of ever-married women and women who have ever used periodic abstinence by knowledge of the fertile period during the ovulatory cycle, NICPS, 1987

Fertile period	Ever- married Women	Periodic abstinence users
During her period	0.1	0.0
Just after her period has ended	30.6	32.1
Middle of the cycle	18.0	52.4
Just before her period begins	7.1	6.7
At any time	4.2	1.7
Other	0.8	1.0
Don't know	39.2	6.1
Total	100.0	100.0
Number of women	11884	513

woman is most likely to get pregnant. The data indicate that knowledge of the reproductive cycle is very limited. Almost 40 percent of all ever-married women say that they do not know when the fertile period is and only 18 percent gave the "correct" response ("in the middle of the cycle"). Women who have used periodic abstinence, however, are considerably more knowledgable about their reproductive cycles. Over half of these women know when they are most fertile, and only 6 percent said they did not know. It should be noted the response categories developed for this question are one attempt at dividing the ovulatory cycle into distinct periods. It is possible that women who gave an answer of, say, "one week after her period" were coded in the category "just after her period has ended," instead of in the category "in the middle of her cycle." Thus, women may actually have a more accurate understanding of their fertility cycles than is reflected in Table 3.16.

# 4. CURRENT USE OF FAMILY PLANNING METHODS

This chapter is especially useful for the National Family Planning Program, because an important measure of program success is the level of family planning use. Use in this context is defined as the proportion of currently married women 15-49 who were using some method of family planning at the time of the survey. This chapter presents data concerning levels and differentials in current use, sources of family planning methods, age at time of first contraceptive use, cost of methods, and some indication of the quality of pill, injection, and condom use.

#### 4.1 Current Use of Family Planning Methods

Table 4.1 shows that 48 percent of currently married women are using contraception in Indonesia, 44 percent using modern methods and 4 percent using traditional methods (periodic abstinence, withdrawal, and other methods such as pijat, herbs, and abstinence). As with ever-use, the pill (16 percent), IUD (13 percent), and injection (9 percent) are the most commonly used methods, together accounting for over 80 percent of current users. Other contraceptive methods account for lower percentages--female sterilization (3 percent), condom (2 percent), periodic abstinence and withdrawal (1 percent each), and male sterilization and Norplant (less than 1 percent each).

The high proportion of modern method use is true for virtually all categories of background characteristics; however clear differences in the overall level of use are observed among subgroups. Younger and older women are less likely to be using contraception than women in the mid-childbearing years; the highest rate of use is reported for women aged 30-34 (59 percent). The pill and injection are more common among younger women (15-30 years), whereas the IUD, condom, male sterilization, and female sterilization are more commonly used by women over 30.

Family planning use is higher among urban women than rural women (see Figure 4.1). Over half (54 percent) of currently married urban women are using a method, compared to 45 percent of rural women. The mix of methods also differs, with urban women relying more heavily on use of condoms, injection, female sterilization, and periodic abstinence, and rural women relying more heavily on the pill and the IUD. It is interesting to see that there is no difference between urban and rural areas in the proportion of women using Norplant.

It is not surprising that contraceptive use is highest in Java-Bali (51 percent), intermediate in Outer Java-Bali I (42 percent) and lowest in Outer Java-Bali II (40 percent), since this is the order in which the family planning program was initiated. Women in Java-Bali tend to rely more heavily on the IUD, injection, and female sterilization than women in the outer islands.

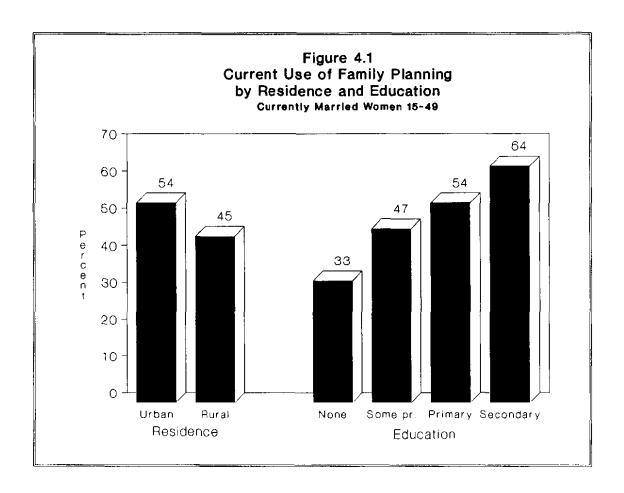
In the Java-Bali region, contraceptive use is highest in Bali and Yogyakarta, and lowest in West and East Java. Almost 70 percent of currently married women in Bali are using contraceptive methods, 97 percent of which are modern methods. This level of contraceptive use is similar to that found in more urbanized, industrial countries, such as Thailand and Brazil, where the prevalence rate is 66 percent (Chayovan, et al. 1988 and Arruda, et al. 1987).

The mix of methods varies considerably by province. Interestingly, the provinces with the highest overall prevalence rate have the smallest proportion of pill users and those with the lowest prevalence rates have the highest proportion of pill users. For example, in Bali and Yogyakarta, pill users account for only 7 and 10 percent of contraceptive use, respectively, while in East and West Java, 36 and 39 percent of users depend on the pill. In Bali, almost half (49 percent) of currently married women--accounting for 72 percent of users--are using the IUD. Injection is the second most widely used contraceptive method in Bali. Yogyakarta shows a pattern similar to that in Bali, with the IUD predominating, and injection and the pill running a distant second and third. In Central Java and Jakarta, the IUD is also the most popular method, but the pill and injection follow more closely behind. Finally, in East and West Java, as already mentioned,

Table 4.1 Percent distribution of currently married women by family planning method currently used, according to background characteristics, NICPS, 1987

					Famil	y plann	ing meti	hod cur	rently	used		• • •			<u> </u>
Background characteristic	Any method	Any modern method	Pill	IUD	Injec- tion	Condom	Female ster- iliza- tion	Male ster- iliza- tion	Nor- plant	Period ic ab- stin- ence	With- drawal	Other	Not curr- ently using	Total	No. of women
Age 15-19 20-24 25-29 30-34 35-39 40-44 45-49	25.5 47.2 54.0 58.7 55.9 42.7 24.4	23.3 43.8 50.1 54.0 51.0 38.2 22.7	12.7 17.0 21.0 19.8 15.1 13.1 4.7	3.7 10.8 12.8 17.2 17.8 13.6 9.8	6.5 13.8 13.2 10.1 8.1 4.1 2.3	0.1 1.1 1.2 2.6 2.5 1.7 0.9	0.0 0.7 1.2 3.7 6.7 5.1 4.6	0.0 0.0 0.1 0.2 0.2 0.3 0.3	0.3 0.4 0.6 0.4 0.6 0.3	0.1 0.9 1.3 1.3 1.6 1.8 0.4	0.9 1.2 1.2 1.9 1.2 1.1 0.7	1.2 1.3 1.4 1.5 2.1 1.6 0.6	74.5 52.8 46.0 41.3 44.1 57.3 75.6	100.0 100.0 100.0 100.0 100.0 100.0	600 1888 2406 1979 1543 1271 1220
Residence Urban Rural	54.3 45.3	48.1 42.3	12.6 17.4	12.9 13.3	11.8 8.4	4.2 0.6	5.9 2.1	0.3 0.1	0.4 0.4	2.8 0.6	1.4 1.2	2.0 1.2	45.7 54.7	100.0 100.0	2977 7930
Region Java-Bali Outer Java-Bali I Outer Java-Bali II	50.9 41.7 39.6	48.1 35.7 33.8	16.0 16.2 15.3	15.5 8.7 8.4	10.7 6.6 7.1	1.8 1.1 1.4	3.5 2.6 1.5	0.2 0.0 0.1	0.4 0.5 0.0	1.1 1.3 2.0	0.7 2.5 1.8	1.0 2.2 2.0	49.1 58.3 60.4	100.0 100.0 100.0	7265 3191 451
Province Jakarta West Java Central Java Yogyakarta East Java Bali	54.0 45.8 53.5 68.1 49.8 68.5	48.5 43.3 51.8 55.7 47.5 66.5	10.6 18.0 15.3 7.0 17.8 5.0	14.8 8.8 18.8 31.3 15.1 49.1	11.7 13.3 10.8 7.3 8.5 5.8	4.9 0.8 2.3 4.1 1.5 1.6	5.7 2.2 3.6 5.1 3.8 4.6	0.4 0.1 0.5 0.9 0.0	0.4 0.1 0.5 0.0 0.8 0.0	3.3 1.1 0.6 4.5 0.6 1.4	0.4 0.5 1.0 2.6 0.5 0.0	1.8 0.9 0.1 5.3 1.2 0.6	46.0 54.2 46.5 31.9 50.2 31.5	100.0 100.0 100.0 100.0 100.0	543 2208 1934 207 2182 191
Education None Some primary Primary completed Secondary or more	32.8 46.8 54.0 64.1	31.3 43.4 49.7 56.0	14.4 18.3 16.3 11.5	10.2 12.2 14.0 19.9	4.5 9.2 12.9 11.7	0.4 0.8 1.7 5.8	1.4 2.4 4.2 6.2	0.0 0.1 0.3 0.5	0.4 0.4 0.3 0.4	0.1 0.6 1.5 4.2	0.5 1.2 1.2 2.6	0.9 1.6 1.6 1.3	67.2 53.2 46.0 35.9	100.0 100.0 100.0 100.0	2406 4426 2605 1470
No. of tiving children None 1 2 3 4 or more	7.7 42.9 56.8 60.4 50.2	6.5 39.7 52.9 55.6 45.6	5.6 17.7 20.6 18.4 14.1	0.3 11.1 16.6 18.4 13.5	0.4 9.5 12.0 11.5 9.1	0.2 1.0 1.5 2.7	0.0 0.2 1.4 3.8 6.4	0.0 0.1 0.2 0.1 0.3	0.0 0.1 0.6 0.7 0.4	0.7 1.1 1.1 1.4 1.3	0.2 1.0 1.6 1.5	0.3 1.1 1.2 1.9 2.0	92.3 57.1 43.2 39.6 49.8	100.0 100.0 100.0 100.0 100.0	1053 2101 2245 1840 3668
Total	47.7	44.0	16.1	13.2	9.4	1.6	3.1	0.2	0.4	1.2	1.3	1.2	52.3	100.0	10907

Note: No current users of diaphragm, foam, or jelly were reported in the survey.



the pill takes precedence. Aside from these three methods, no more than about five percent of women are using any other method in any of the provinces.

Contraceptive use increases with level of education. One-third of currently married women with no education are using a method, compared to two-thirds of those with secondary education. While pill use does not vary much by education level, use of almost all other methods is higher for better educated women. Traditional methods also account for a higher proportion of users among the better educated women than among less educated women.

As with age, contraceptive use increases rapidly with the number of living children a woman has, however it reaches a peak among women with 3 children, after which it declines among women with 4 or more children. Eight percent of childless women are using, presumably to space their first birth. They tend to rely almost exclusively on the pill. As the number of children increases, the reliance on the pill diminishes relative to the IUD and injection. Use of female sterilization also increases with number of children.

Some idea of the extent to which contraceptive practice has changed in Indonesia over the past decade can be seen in Table 4.2 and Figure 4.2 which show the contraceptive prevalence rates for the provinces of Java-Bali in 1976 and 1987. In the 11 years between the two surveys, contraceptive use has doubled, from 26 to 51 percent. The greatest increase has occurred in West Java, which, despite the increase, still has the lowest rate in both years. As Table 4.3 indicates, most of the difference in the overall levels of use between 1976 and 1987 can be attributed to increased use of injection, the IUD, and female sterilization.

Table 4.2 Percent of currently married women in Java-Bali who are currently using any family planning method by province, 1976 Indonesia Fertility Survey and 1987 NICPS

Province	1976 IFS	1987 NICPS	Ratio 1987/ 1976
Province			
Jakarta	28	54	1.9
West Java	16	46	2.9
Central Java	28	54	1.9
Yogyakarta	40	68	1.7
East Java	32	50	1.6
Bali	38	69	1.8
Total	26	51	2.0

Source: Central Bureau of Statistics, 1978, Table 5.6.

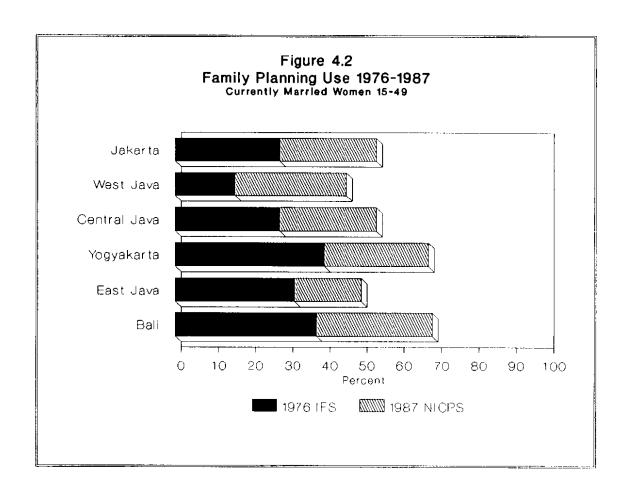


Table 4.3 Percent of currently married women in Java-Bali currently using family planning methods, 1976 Indonesia Fertility Survey and 1987 NICPS

Method	1976 1FS	1987 NICPS
Any method	26.3	50.9
Pill	14.9	16.0
IUD	5.6	15.5
Injection	0.2	10.7
Diaphragm/foam/jelly	0.1	0.0
Condom	1.8	1.8
Female sterilization	0.3	3.5
Male sterilization	0.0	0.2
Norplant	-	0.4
Periodic abstinence	0.8	1.1
Withdrawal	0.3	0.7
Other .	2.3	1.0
Number of women	7974	7265

Source: Carrasco, 1981, Table 4.1.

Table 4.4 Percent distribution of currently married women by type of family planning method currently used, age, and number of living children according to region, NICPS, 1987

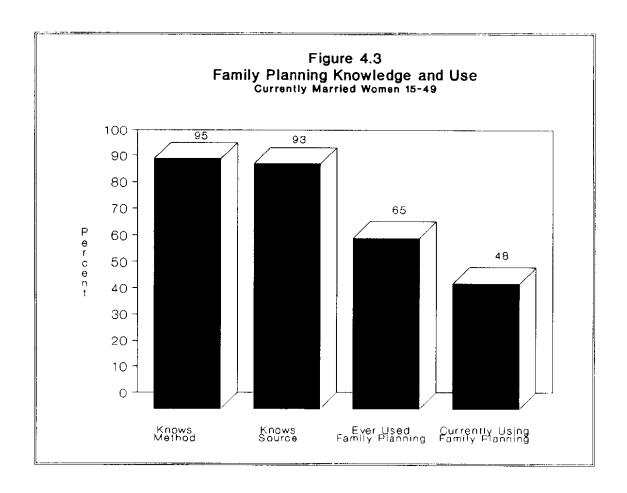
		R	egion	
Age/number of living children/type of method used	Java- Bali	Outer Java- Bali I	Outer Java- Bali II	Total
Under 30				
Not using any method	48.3	59.5	62.7	52.1
Using temporary methods	37.0	32.9	30.0	35.9
Using long-term methods	14.7	7.6	7.4	12.3
30 or over				
Not using any method	49.7	57.4	58.2	52.3
Using temporary methods	26.5	27.7	29.3	27.0
Using long-term methods	23.7	14.9	12.6	20.7
Fewer than 3 children	1	1		
Not using any method	50.6	60.2	62.4	53.
Using temporary methods	31.7	31.0	28.5	31.4
Using long-term methods	17.7	8.8	9.1	15.
Three or more children				
Not using any method	45.4	55.8	57.4	49.1
Using temporary methods	30.1	28.6	31.3	29.
Using long-term methods	24.5	15.7	11.3	20.
Total	1	1		
Not using any method	49.1	58.3	60.4	52.3
Using temporary methods	31.3	30.0	29.6	30.
Using long-term methods	19.6	11.7	10.0	16.
Total	100.0	100.0	100.0	100.

Note: Long-term methods are male or female sterilization, Norplant and IUD, while temporary are all others.

As mentioned in Chapter 1, the National Family Planning Program's policy toward contraceptive use is based upon its "Pancakarya" (five principles), a set of guidelines for maintaining the family planning program. One of the principles involves a specific goal for family planning use, namely, that women over 30 and those with 3 or more children should be using the most effective means of fertility control available. Table 4.4 presents some NICPS data that can be used to evaluate the success of this effort.

The data show that for women 30 and over, only about 20 percent are using long-term methods, and over half are not using any method at all. The results for women with three or more children is very similar to that for women 30 and above--21 percent are using long-term methods and half are not using any method. These results are undoubtedly due to the relatively low rates of sterilization in Indonesia (3 percent of currently married women), since appropriate methods for women 30 and over and women with 3 or more children are the long-term methods such as sterilization, IUD, and Norplant. The Java-Bali region has been much more successful than the outer islands in getting women to use methods appropriate for their status. Twice as many women 30 and over in Java-Bali are using long-term methods than in Outer Java-Bali II. The same ratios apply for women with three or more children.

Figure 4.3 shows the relationship between knowledge and use of family planning among Indonesian women. While 95 percent of married women know at least one contraceptive method and 93 percent know of a source for contraceptives, only 65 percent have ever used a method and only 48 percent are currently using. The proportion of women who know about family planning and know a source but have never used any method is relatively high--28 percent.

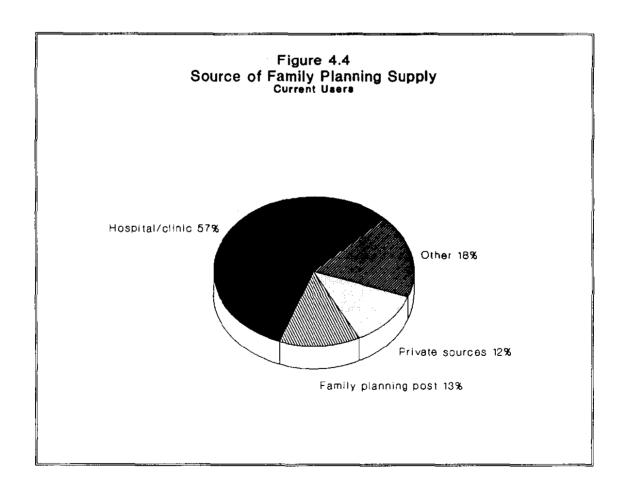


### 4.2 Sources of Contraceptive Methods

Information concerning sources of contraceptive services is important for family planning administrators, especially given the current emphasis on making programs self-sustaining. As shown in Table 4.5 and Figure 4.4, family planning clinics, hospitals and health centers are the most important source, supplying 57 percent of all users. Family planning posts provide 13 percent of services, family planning field workers supply 5 percent, and integrated service posts (posyandu) account for 4 percent of all users. Private sources include doctors (6 percent), midwives (4 percent), and pharmacies and shops (3 percent).

Sources vary by the method used. Pill users rely on clinics, hospitals and health centers, but also are likely to use family planning posts considerably more than users of other methods. Family planning posts include village family planning posts, which in Bali are carried out through "Banjar," and in other regions through women's clubs with various names. This means that community participation in delivering the pill is high. The proportion of pill users whose source is "other" is high as well (17 percent). It is unclear what this category might consist of, except possibly friends or relatives. Surprisingly, less than 2 percent of pill users obtain their supplies from pharmacies or shops. On the other hand, most condom users are supplied by pharmacies, with hospitals and clinics the second most widely used source. Users of injection, IUD, sterilization and Norplant primarily use clinics, hospitals and health centers. Private doctors and midwives supply about one in 4 injection users, while mobile clinics supply one in 10 Norplant users.

Private sources of supply are mentioned more frequently by urban users than by rural users. As illustrated in Table 4.5, 22 percent of urban users indicate private doctors, midwives, or pharmacists to be



their source of family planning, as opposed to 7 percent of rural respondents. In addition to private sources being more available in urban areas, this may reflect the national family planning program's recent efforts to market the use of private providers for family planning services in the urban areas. Also, probably due to greater availability and accessibility, clinics and hospitals were more frequently mentioned by urban than rural respondents.

Table 4.5 For all current users of supply or clinic methods, the percent distribution by most recent source of supply or information, according to urban-rural residence and method, NICPS, 1987

		\$upply	methods			Cli	nic metho	ods		
Source of supply	Pill	Condom	Injec- tion	Total	IUD	Female steril- ization	Male steril- ization	Nor- plant	Total	Total users
Urban Users						<u> </u>	•		-	•
FP clinic/hospital/health center	49.7	20.9	62.8	50.9	70.5	88.1	91.5	73.3	76.2	61.2
FP fieldworker (PLKB)	4.9	3.5	1.0	3.1	0.1	0.0	0.0	0.0	0.1	1.9
FP post (Pos KB)	14.3	9.7	0.6	7.9	2.8	0.0	0.0	0.0	1.8	5.4
Mobile clinic (TKBK/TMK)	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.6	0.
Safari campaign drive	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.7	0.
Integrated service post (posyandu)	7.3	1.3	0.9	3.8	0.4	0.0	0.0	13.8	0.5	2.
Pharmacy/shop	6.7	57.5	0.0	11.4	0.0	0.0	0.0	0.0	0.0	6.
Private doctor	2.7	1.3	19.9	9.6	19.5	9.9	0.0	9.9	16.1	12.
Private midwife	4.1	3.6	14.7	8.4	4.3	0.5	0.0	0.0	3.0	6.
Other	10.2	1.6	0.0	4.7	0.4	1.4	8.5	0.0	0.8	3.
Don't know	0.0	0.6	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.
Number	374	124	351	849	385	177	9	12	583	143
Rural Users										•
FP clinic/hospital/health center	25.8	28.7	66.1	38.7	77.8	98.8	100.0	59.7	80.2	54.
FP fieldworker (PLKB)	13.4	6.2	1.6	9.5	3.2	0.0	0.0	4.5	2.8	7.
FP post (Pos KB)	33.5	9.3	4.7	23.7	5.6	0.0	0.0	4.2	4.8	16.
Mobile clinic (TKBK/TMK)	0.3	0.4	0.9	0.5	1.6	0.0	0.0	13.6	1.7	1.
Safari campaign drive	0.0	0.0	0.0	0.0	1.8	0.0	0.0	4.3	1.6	0.
Integrated service post (posyandu)	5.6	1.3	6.1	5.7	3.3	0.0	0.0	0.0	2.8	4.
Pharmacy/shop	0.2	43.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.
Private doctor	0.5	0.0	7.4	2.7	2.5	1.1	0.0	0.0	2.2	2.
Private midwife	1.9	4.1	9.9	4.5	2.3	0.0	0.0	0.0	1.9	3.
Other	18.9	3.6	2.4	13.3	1.6	0.1	0.0	13.6	1.7	9.
Don't know	0.0	3.0	0.0	0.1	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	100.
Number	1378	48	670	2096	1057	163	9	34	1263	335
All Users										
FP clinic/hospital/health center	30.9	23.1	65.2	42.5	76.0	93.5	95.6	63.3	79.1	56.
FP fieldworker (PLKB)	11.6	4.3	1.5	7.6	2.3	0.0	0.0	3.5	2.0	5.
FP post (Pos KB)	29.3	9.6	3.3	19.2	4.9	0.0	0.0	3.2	4.0	13.
Mobile clinic (TKBK/TMK)	0.3	0.1	0.6	0.4	1.4	0.0	0.0	10.3	1.3	0.
Safari campaign drive	0.0	0.0	0.0	0.0	1.6	0.0	0.0	3.3	1.3	0.
Integrated service post (posyandu)	6.0	1.3	4.4	5.1	2.5	0.0	0.0	3.6	2.1	3.
Pharmacy/shop	1.6	53.6	0.0	4.1	0.0	0.0	0.0	0.0	0.0	2.
Private doctor	1.0	0.9	11.8	4.7	7.1	5.6	0.0	2.6	6.6	5.
Private midwife	2.4	3.7	11.6	5.6	2.8	0.2	0.0	0.0	2.3	4.
Other	16.9	2.1	1.6	10.7	1.3	0.5	0.0	10.2	1.3	7.
Don't know	0.0	1.3	0.0	0.1	0.0	0.1	4.4	0.0	0.0	0.
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.
Number	1752	172	1021	2945	1442	340	18	45	1846	479

Another government program at the village level is the integrated health post (posyandu) which provides five services, including family planning, usually once a month. As expected, slightly more rural (5 percent) than urban users (3 percent) mentioned the posyandu as a source of family planning services. Also, as expected, family planning fieldworkers and village contraceptive distribution centers (FP post) were mentioned more frequently by rural respondents (24 percent) than urban (7 percent).

As stated previously, satisfaction with contraceptive service is an important issue in retaining acceptors. In order to try to measure dissatisfaction with services, NICPS interviewers asked all current users if there was anything they disliked about the service they received at the last place they obtained their methods. Table 4.6 shows that 97 percent of users said they had no problem with the source of service. This is true for all service delivery types except mobile clinics, which had a large proportion in the "other" category. None of the specific problems listed, such as, discourteous staff, long waiting period for service, high cost, inability to get desired method, or use of male staff were cited by more than two percent of users.

Table 4.6 Percent distribution of current users who obtained a method at a source by type of dissatisfaction with the service (if any), according to type of source last visited, NICPS, 1987

	Nature of dissatisfaction with service								
Source of supply	No problem	Wait too long	Staff dis- court- eous	Expen- sive	Unable to get desired method	Male staff	Other	Total	Number of current users
FP clinic/hospital/health center	97.0	1.3	0.7	0.4	0.0	0.1	0.5	100.0	2702
FP field worker (PLKB)	97.3	0.6	0.0	0.3	1.3	0.0	0.5	100.0	259
FP post (Pos KB)	99.3	0.1	0.0	0.0	0.1	0.0	0.5	100.0	636
Mobile clinic (TKBK/TMK)	76.1	1.2	0.0	0.0	0.0	0.0	22.7	100.0	35
Safari campaign drive	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	25
Integrated service post (posyandu)	96.9	0.0	1.5	0.7	0.8	0.0	0.1	100.0	189
Pharmacy/shop	95.3	0.0	0.0	0.0	1.5	0.0	3.2	100.0	120
Private doctor	99.0	1.0	0.0	0.0	0.0	0.0	0.0	100.0	261
Private midwife	98.5	0.2	0.0	0.0	0.0	0.7	0.6	100.0	207
Total	97.4	0.9	0.5	0.3	0.2	0.1	0.6	100.0	4434

Although only 3 percent of currently married women have been sterilized, making it the fourth most widely used method, it is interesting to note changes over time in the age of women at the time they choose sterilization. Table 4.7 shows that, except for operations performed in the past two years, there has been a general decline in the median age of women at the time that they were sterilized, from 33 years for those sterilized 8 or more years ago, to 31 for those sterilized 2 or 3 years before the survey.

Table 4.7 For sterilized women, the percent distribution by age at the time of sterilization, according to the number of years since the operation, NICPS, 1987

Years since operation		Age at			No. of	Median		
	Under 25	25-29	30-34	35-39	40-49	Total	women	age
Less than 2	13.2	12.8	42.8	23.2	8.0	100.0	72	32.5
2-3	11.6	30.1	36.2	13.8	8.3	100.0	86	30.6
4-5	8.5	23.9	38.8	18.3	10.4	100.0	66	31.5
6-7	3.1	27.1	38.2	22.2	9.4	100.0	36	31.7
8-9	3.5	14.3	38.9	43.0	0.3	100.0	46	33.4
10 or more	3.4	20.3	59.8	16.5	-	100.0	34	32.9
Total	8.5	21.8	41.0	21.8	6.9	100.0	<b>3</b> 40	32.1

<sup>-</sup> Data not available due to cutoff age of 49 in survey.

Table 4.8 is similar to Table 4.7 except that it shows the number of living children that sterilization acceptors had at the time of the operation instead of their age. The median number of children at time of operation shows an uneven pattern over time, with a slight decline recently. Women have about five children at the time they or their husbands are sterilized. It is interesting that 10 percent chose sterilization when they have only one or two living children.

Table 4.8	For sterilized women, the percent distribution by number of living
	children at the time of sterilization, according to number of
	years since the operation, NICPS, 1987

Years since operation	Nu	mber of t	iving chi	ldren		No. of Women	Median no. of children
	1	2	3	4+	Total		
Less than 2	2.0	16.5	23.5	58.0	100.0	72	4.4
2-3	0.0	9.3	22.6	68.1	100.0	86	4.8
4-5	0.0	2.4	26.2	71.4	100.0	66	5.3
6-7	0.0	17.5	17.5	65.0	100.0	36	4.8
8-9	0.0	3.3	14.6	82.1	100.0	46	5.9
10 or more	7.9	3.1	11.8	77.2	100.0	34	5.4
Total	1.2	8.9	20.8	69.1	100.0	340	5.0

#### 4.3 Quality of Use of Pill, Injection, and Condom

As stated previously, the pill is the most popular method of contraception used in Indonesia. In order to study the "quality" of pill use, the NICPS included a series of questions for women who said they were using pill. These women were first asked if they had a package of pills in the house. If not, women were asked why they did not have a package and were requested to identify the brand of pills they use from a brand chart that interviewers carried with them. If respondents said they did have a package of pills in the house, the interviewer asked to see one, from which she recorded the brand and noted on the questionnaire whether pills were missing in order. If either no pills were missing or pills were missing out of order, the interviewer asked why. Finally, all pill users were asked when they last took a pill.

Table 4.9 shows results from some of these questions on the quality of pill use. About 94 percent of pill users were able to show the interviewer a packet of their pills. Although not included in the table, virtually all users who could not show a packet gave the reason that they had run out of supplies. Of the users who did produce a pill packet, 91 percent had pills missing in order. About 40 percent of women whose packets showed pills not missing or missing out of order said that the reason for this was that the packets were new, while the remainder of such women gave other reasons. It is rather disconcerting that only 87 percent of all pill users actually took a pill less than two days before the survey. Most women who had not taken a pill less than two days before said that the reason was either that they were having their menstrual periods or that they had run out of pills. A few women said they were not taking because their husbands were away. Although many of the women who have not taken a pill in the last two days can be considered to be still protected by the pill, the data imply that effective pill use is somewhat lower than the reported number of pill users.

Differentials in quality of pill use by background characteristics are small. The only consistent difference is that quality of pill use appears to be higher in Outer Java-Bali II than in either Java-Bali or Outer Java-Bali I.

As mentioned above, all pill users were asked about the brand of pill they used. As shown in Table 4.10, almost 90 percent of pill users are using a brand from the national family planning program (Pil Kcluarga Berencana). The only other brands which have a sizable number of users are Marvelon-28 and Ovostat-28.

Table 4.9 Percent of currently married women pill users who have a packet at home, have taken pills in order, and who took a pill less than two days ago, by background characteristics, NICPS, 1987

	1	T	1	1 1	
		Percent	Percent of	Percent of	
	ł	of pill	packets	pill users	
		users	with	who	Number
	Percent	who can	pills	took pill	of
Background	using	show	missing	less than	pill
characteristic	pill	package	in order	2 days ago	users
Age					
15-19	12.7	97.4	92.2	92.9	76
20-24	17.0	95.4	92.8	90.1	322
25- <b>29</b>	21.0	93.3	90.7	85.7	506
30-34	19.8	96.2	90.4	87.8	391
35-39	15.1	89.3	90.7	83.9	233
40-44	13.1	91.9	90.5	86.6	167
45-49	4.7	89.3	96.2	90.1	57
Residence					
Urban	12.6	94.3	93.1	86.8	374
Rural	17.4	93.5	90.8	87.4	1378
Region					
Java-Bali	16.0	93.6	90.3	86.9	1166
Outer Java-Bali I	16.2	93.4	92.5	87.4	517
Outer Java-Bali II	15.3	98.4	96.8	92.1	69
Province					
Jakarta	10.6	98.2	96.3	92.8	58
West Java	18.0	95.3	90.6	90.5	398
Central Java	15.3	90.4	88.7	82.5	296
Yogyakarta	7.0	85.1	95.5	73.9	15
East Java	17.8	93.7	89.9	86.2	389
Bali	5.0	100.0	98.6	90.5	10
Education					
None	14.4	92.1	90.4	87.1	346
Some primary	18.3	94.9	91.6	89.1	811
Primary completed	16.3	92.6	90.5	84.8	426
Secondary or more	11.5	93.7	93.5	85.3	169
Total	16.1	93.7	91.2	87.3	1752

Table 4.10 Percent distribution of currently married pill users by brand of pill used, NICPS, 1987

Brand of pill	Percent	Number of pill users
Eugynon Microgynon 30 ED Neogynon ED Triquilar ED Lyndiol Marvelon 28 Ovostat 28 Nordette 28 Nordiol 28 Ovulen Fe-28 Ovulen 50 Fe-28 Pil Keluarga Berenc. Other	0.3 0.7 0.5 0.3 0.2 2.7 1.4 0.2 0.1 0.1 0.2 89.1	5 12 8 6 3 48 25 3 2 2 2 3 1562
Don't know, missing	0.7	12
Total	100.0	1752

Similar to questions on quality of pill use, NICPS interviewers asked all injection users when they received their last injection and all condom users to show a package of condoms. The results are shown in Table 4.11 by background characteristics of women. Ninety-four percent of injection users received an injection less than three months ago, which means that 6 percent of injection users may actually be at risk of pregnancy. Since one brand of injection used in Indonesia requires bimonthly inoculations, the proportion of women at risk may actually be slightly higher, although this brand is not as widely used as the three-month brand. Differences by background characteristics are small.

The proportion of condom users who can show the interviewer a packet is surprisingly high (90 percent), considering that this is a method used by men. In interpreting the data, one should remember that the condom is not widely used in Indonesia, with less than 2 percent of currently married women relying on it. The most popular brands used are Young Young, KB, and DuaLima. Differences by background characteristics in the proportion of condom users who can show a packet are mostly caused by small numbers.

All current contraceptive users in the NICPS were asked whether they had experienced problems with the method they were using and if so, what the problems were. As Table 4.12 indicates, 90 percent or more of users of all methods did not report any problems with the methods they were using.

Table 4.11 Percent of currently married women who are using injection and condom, percent of injection users who received an injection less than three months ago, and percent of condom users who can show a packet, by background characteristics, NICPS, 1987

	Inj	ection users	<b>1</b>	С	ondom users	
Background characteristic	Percent using	% of users injected less than 3 mos. ago	Number of injection users	Percent using	Percent of users who can show package	Number of condom users
Age						
15-19	6.5	88.7	39	0.1	(50.0)	1
20-24	13.8	95.1	261	1.1	100.0	20
25-29	13.2	94.7	317	1.2	74.7	30
30-34	10.1	92.8	199	2.6	97.1	52
35-39	8.1	94.8	125	2.5	86.7	38
40-44	4.1	97.1	52	1.7	90.3	21
45-49	2.3	91.7	28	0.9	(92.5)	10
Residence						
Urban	11.8	94.5	351	4.2	88.5	124
Rural	8.4	94.2	670	0.6	94.1	48
Region						
Java-Bali	10.7	95.8	777	1.8	92.8	132
Outer Java-Bali I	6.6	89.2	212	1.1	79.6	34
Outer Java-Bali II	7.1	91.5	32	1.4	(88.9)	6
Province						
Jakarta	11.7	94.5	64	4.9	94.8	27
West Java	13.3	98.1	293	0.8	(100.0)	17
Central Java	10.8	96.2	209	2.3	91.9	44
Yogyakarta	7.3	97.7	15	4.1	85.2	9
East Java	8.5	92.5	185	1.5	90.3	32
Bali	5.8	85.6	11	1.6	(92.9)	3
Education						
None	4.5	94.7	108	0.4	(100.0)	9
Some primary	9.2	94.9	405	0.8	79.9	34
Primary completed	12.9	94.5	336	1.7	89.2	44
Secondary or more	11.7	91.9	172	5.8	93.5	85
Total	9.4	94.3	1021	1.6	90.0	172

Note: Numbers in parentheses are based on fewer than 20 unweighted cases.

Although the national family planning program is essentially a government program, it is strongly supported by community participation. One indicator of the level of this support is the "self-sustainability" of the community in the provision of contraceptive services. One means of measuring self-sustainability is the proportion of users who themselves pay for services. In the NICPS, all users were asked how much the method cost, including any costs for service. The results are given in Table 4.13.

The data show that overall, 64 percent of users obtain their methods free of charge. The injection has the highest proportion of self-sustaining users, with only 28 percent of users getting the method free, followed by female sterilization (40 percent), condom (50 percent), Norplant (71 percent), IUD (76 percent), and the pill (84 percent). Generally, a larger percentage of women outside Java-Bali get their methods free. The data show that female sterilization is the most costly method, with a mean cost of Rp. 121,000, followed by the pill at Rp. 17,500, and the IUD at Rp. 15,000. Data on cost of methods should be regarded cautiously. Although the instructions were to put the cost of the method plus service costs, it is not always clear what the cost actually included; for example, users of supply methods, such as the pill and condom, might have given the cost of more than one month's supply. Also, it is particularly easy for interviewers and/or data entry clerks to be off by one column when entering the figures.

Table 4.12 Percent distribution of current users by the type of problem experienced with the method, according to method, NICPS, 1987

			Proble	ет ехре	rienced	with m	ethod:				Num- ber of curr- ent users
Method	None	Method not effec- tive	Hus- band disap- proves	con-	Access avail- abil- ity	1	Incon- veni- ent to use	Other	Don't know	Total	
Pill	91.9	0.0	0.0	7.2	0.2	0.0	0.1	0.2	0.4	100.0	1752
IUD	93.7	0.1	0.1	5.5	0.0	0.0	0.1	0.5	0.0	100.0	1442
Injection	89.9	0.1	0.0	9.0	0.0	0.0	0.0	0.9	0.1	100.0	1021
Condom	90.3	0.0	1.9	0.4	0.0	0.0	3.9	3.5	0.0	100.0	172
Female sterilization	91.7	0.0	0.0	7.2	0.0	0.1	0.0	1.0	0.0	100.0	340
Male sterilization	89.9	0.0	0.0	8.9	0.0	0.0	0.0	1.2	0.0	100.0	18
Norplant	97.5	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	100.0	45
Periodic abstinence	97.0	0.2	0.2	0.0	0.0	0.0	2.1	0.5	0.0	100.0	127
Withdrawal	92.0	0.0	0.0	0.1	0.0	0.0	2.4	5.5	0.0	100.0	136
Total	92.3	0.1	0.1	6.3	0.1	0.0	0.3	0.7	0.1	100.0	5207

Note: Excludes methods with fewer than 20 users; total includes all users.

Table 4.13 Percent of current users who get their method free and the mean cost of the method (including services) for those who pay, by method and region, NICPS, 1987

Method	Jeva-Balī			Outer Java-Bali I			Outer Java- Bali II *		Total		
	Percent getting free	Mean cost (Rp.)	No. of users	Percent getting free	Mean cost (Rp.)	No. of users	Percent getting free	No. of users	Percent getting free	Mean cost (Rp.)	No. of users
Pill	83.2	11300	1166	85.1	26082	516	98.3	69	84.3	17502	1751
IUD	75.2	10960	443	78.2	29340	117	74.5	19	75.8	14956	579
Injection	25.3	1823	775	31.1	2489	212	55.7	32	27.5	1961	1019
Condom	47,8	1385	115	57.3	*	26	51.2	6	49.6	1494	147
Female ster.	35.9	68678	83	52.2	*	24	_	0	39.8	121230	107
Norplant	82.9	*	31	45.4	*	14	-	0	70.9	*	45
Total	61.6	8179	2613	69.3	26264	910	81.8	126	64.2	12481	3649

Note: Women who have been using IUD or female sterilization for more than three years have been excluded to keep cost estimates current. In 1988, U.S.\$1 = about Rp.1650.

<sup>\*</sup> Based on fewer than 20 cases.

# 5. NONUSE AND INTENTIONS FOR USE OF FAMILY PLANNING

This chapter covers information about those who are not using family planning (nonusers), whether or not they have used in the past. Four topics are discussed: reasons for discontinuing contraception, reasons for nonuse, intentions about using contraception in the future, and methods potential users intend to use. These issues are important to family planning decisionmakers in determining future policies.

#### 5.1 Reasons for Discontinuation and Nonuse

Of primary importance to policymakers are the reasons why family planning users drop out. In the NICPS, data were collected for women who stopped using a contraceptive method within the five years before the survey on the reasons they stopped using. The percent distribution of women who discontinued family planning use by reason for discontinuing and by method discontinued is given in Table 5.1.

As might be expected, the main reason for stopping use of family planning is to become pregnant. This is true for all methods except injection, for which the main reason for termination was health concerns. For the pill and the IUD, the second most common reason for discontinuation is health concerns. Nineteen percent of IUD discontinuation was due to method failure and it would be useful to know which brands of IUD had been used. It should be noted that, although the code was labeled "method failed," respondents may have interpreted outcomes other than pregnancy as failure, such as, for example, expulsion of the IUD.

About 7 percent of women who stopped using injection said that they did so because of the high cost. This is interesting in view of the fact that, as discussed in Chapter 4, about one-quarter of current injection users obtain the method free and the other three-quarters pay on average about Rp. 2000.

Not surprisingly, health concerns are less frequently cited as reasons for discontinuation of the condom, periodic abstinence, and withdrawal as they are for the pill, IUD, and injection. Instead, substantial proportions of women who discontinue the former three methods cite method failure, inconvenience, and husband disapproval as reasons for discontinuation. Method failure is also cited as a reason for discontinuing herbs.

Table 5.1 Percent distribution of women who have discontinued a method in the last five years by main reason for last discontinuation, NICPS, 1987

Reason for discontinuation	Pill	IUD	Injec- tion	Condom	Period ic ab- stin- ence	With- drawal	Herbs (Jamu)	Other	Total
To become pregnant	39.3	30.6	22.2	29.3	40.1	49.0	44.4	30.9	33.5
Method failed	6.4	17.7	4.3	12.8	29.9	13.1	9.9	23.6	9.7
Husband disapproves	1.4	0.5	1.3	7.5	4.5	7.1	1.8	2.3	2.0
Health concerns	29.2	26.9	37.4	5.4	3.5	2.5	8.3	7.8	26.3
Access/availability	1.6	0.6	4.3	1.8	0.0	0.0	0.4	0.0	1.9
Cost too much	0.1	0.0	6.6	0.0	0.0	0.0	3.6	0.0	1.7
Inconvenient	3.4	2.2	3.5	15.8	10.2	7.3	0.9	2.8	4.2
Infrequent sex	1.4	0.5	0.9	2.8	1.0	0.9	2.0	0.3	1.1
Fatalistic	2.0	1.1	2.0	0.0	0.6	0.6	0.9	0.0	1.5
Other	14.5	18.5	16,9	24.1	10.2	19.5	25.3	29.2	17.3
Don't know	0.4	0.0	0.2	0.3	0.0	0.0	2.5	0.0	0.3
Missing	0.3	1.4	0.4	0.2	0.0	0.0	0.0	3.0	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1481	609	849	169	130	161	94	63	3611

Note: Total includes data for methods which had fewer than 20 women discontinuing.

Probably the best way of assessing obstacles to family planning use is to ask nonusers why they are not using; this was done in the NICPS. Table 5.2 gives the distribution of currently married, non-pregnant, nonusers by age and reason for nonuse. As with reasons for discontinuation discussed in the previous table, the major reason for nonuse is a desire to get pregnant. Overall, one-quarter of nonusers cite this reason. As expected, the proportion is greater among younger than older women. Excessive cost is the next most commonly given reason for nonuse, but this is important only among older nonusers and is mentioned by only a small proportion of younger nonusers. Similarly, inconvenience and religious constraints are cited more frequently by older than younger nonusers. On the other hand, difficulties in access and availability of contraception are mentioned more frequently by younger nonusers. Lack of knowledge and health concerns do not appear to be major reasons for nonuse.

Drawing conclusions from the three questions used in the NICPS to attempt to identify obstacles to contraceptive use is not straightforward. Data in Table 3.8 imply that most women who have heard of methods do not think there are problems in using them, and the only commonly cited problem is health concerns about the pill, IUD, and injection. Health concerns are also frequently mentioned as reasons for discontinuing these methods (Table 5.1). However, among nonusers, health concerns are rarely cited as reasons for nonuse, while reasons such as access/availability, cost, and religion appear to be more important obstacles for nonusers than for women who discontinued methods or who were merely giving their opinions on methods they had heard of.

In interpreting the results, it is important to keep in mind the denominators of the various tables and the wording of the questions. Respondents to the first question on perceived problems with methods were all women who had heard of the particular method. It seems they tended to focus on the more "physical" problems with using methods. Women who had used methods and stopped also tended to cite "physical" reasons for discontinuing. If access/availability, cost, or religion had been concerns, they would have been less likely to have started using in the first place, and thus would not tend to cite them as reasons for terminating use. On the other hand, these may be more important obstacles to those who are not using. Finally, all these data should be viewed cautiously since collecting accurate data on reasons for making decisions is difficult in a short, rather impersonal interview.

Table 5.2 Among currently married non-pregnant nonusers, the percent distribution by reason for nonuse, according to broad age categories, NICPS, 1987

		Age		
Reason for nonuse	Less than 20	20-29	30 or over	Total
Desires pregnancy	48.4	36.0	15.1	24.3
Lack of knowledge	2.0	1.0	4.1	2.9
Opposed to family planning	0.0	0.5	0.6	0.5
Husband disapproves	4.0	6.3	4.9	5.3
Others disapprove	0.0	0.6	0.2	0.3
Infrequent sexual activity	0.5	1.4	0.7	0.9
Postpartum/breastfeeding	0.0	0.0	0.6	0.4
Menopausal/subfecund	0.7	1.0	2.0	1.6
Health concerns	1.7	2.4	2.1	2,2
Access/availability	13.0	18.6	4.3	9.7
Costs too much	1.6	2.8	17.9	11.8
Fatalistic	1.0	0.6	0.7	0.7
Religion	4.6	6.3	10.9	8.9
Inconvenient	3.5	8.7	11.1	9.8
Other	14.4	9.8	18.1	15.1
Don't know	4.6	4.0	6.7	5.6
Total	100.0	100.0	100.0	100.0
Number of women	328	1661	2965	4954

## 5.2 Intention to Use Contraception in the Future

All respondents who were not using contraception at the time of the interview were asked if they intended to use at any time in the future. Table 5.3 shows that 40 percent of currently married nonusers intend to use, 46 percent do not intend to use and 14 percent are undecided. Of those who do intend to use, about half (21 percent of all nonusers) intend to use in the next 12 months. Unfortunately, women with 4 or more children are less likely to intend to use than women with fewer children. The reason may be that many consider themselves "not at risk" due to menopause or subfecundity, and therefore not in need of family planning. Half or more of nonusers with no child or only one child intend to use; however, most of these women do not intend to use in the next 12 months, perhaps because they want to have another child soon.

Table 5.4 presents data on the methods that women intend to use. Almost all nonusers who intend to use, plan to use either the pill (40 percent), injection (34 percent), or the IUD (12 percent). There are almost no differences in potential method choice between those who intend to use in the next 12 months, those who intend to use after the next 12 months and those who are uncertain of when they intend to use. This pattern differs only slightly from the distribution of current users by method.

Table 5.3 Percent distribution of currently married nonusers by intentions to use in the future, according to number of living children, NICPS, 1987

	Number of living children						
Intention to use in future	None	1	2	3	4+	Total	
Intend to use in next 12 months	14.4	22.3	28.4	26.7	17.5	21.0	
Intend to use later	16.9	12.9	7.0	4.5	2.5	8.2	
Intend to use, not sure when	19.0	16.4	9.5	8.1	4.9	10.9	
Unsure about whether to use	19.3	15.2	15.2	14.4	9.9	14.1	
Does not intend to use	30.4	33.2	39.9	46.3	65.2	45.8	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Number of women	972	1200	970	729	1828	5699	

Table 5.4 Percent distribution of currently married nonusers who intend to use in the future, by method preferred, according to whether they intend to use in the next 12 months or later, NICPS, 1987

Intended method	Intends to use in next 12 mos.	Intends to use later	Intends to use, not sure when	Total
Pill	41.7	41.6	36.5	40.3
IUD	11.0	13.1	13.9	12.2
Injection	34.9	34.4	30.8	33.7
Diaphragm/foam/jelly	0.3	0.0	0.0	0.2
Condom	1.4	0.5	0.8	1.1
Female sterilization	3.5	2.5	2.6	3.0
Norplant	1.2	0.5	1.7	1.2
Periodic abstinence	1.0	0.8	0.9	0.9
Withdrawal	0.5	0.2	0.6	0.4
Herbs (Jamu)	1.3	1.3	0.4	1.1
Abdominal massage	0.3	0.0	0.0	0.2
Other	1.4	2.0	3.4	2.0
Don't know	1.5	3.1	8.4	3.7
Total	100.0	100.0	100.0	100.0
Number of women	1199	466	622	2287

#### 6. FERTILITY

#### 6.1 Background

This chapter contains a discussion of levels, trends and differentials in fertility in Indonesia. Fertility information was gathered by two procedures in the NICPS. First, each respondent was asked to report aggregate information about her children in terms of the number of sons and daughters living with her, sons and daughters living elsewhere, and sons and daughters who had died. Then she was asked a full birth history in which the following was collected for each birth: name, date of birth, sex, survivorship status, and age at last birthday, or age at death, as appropriate.

The general questions on the total number of children ever born and surviving are often used in population censuses and surveys in Indonesia to calculate indirect fertility and mortality estimates, particularly of infants and children. The birth history is used infrequently, because it is more complicated and takes longer to collect; however, because of the more detailed information collected in the birth history, it offers a richer set of data for analysis.

Because the fertility rates presented in this chapter are all based on direct measures derived from the birth history section of the NICPS questionnaire, it is appropriate to note some potential drawbacks of the method. First of all, of course, only those women surviving until the survey date were interviewed in the survey, and, therefore, there is no record of the fertility of women who did not survive. This would only bias the rates if mortality of women in childbearing ages were high and if fertility of surviving and non-surviving women differed substantially, neither of which is probably true for Indonesia. A second issue has to do with the limitation of the respondents to ever-married women. However, since most births in Indonesia occur within marriage, the number of births to single women is quite small. The most important disadvantage of the birth history approach is in the difficulty in obtaining accurate data on the timing of all births. Errors in reporting the number of children affect the estimate of fertility level, whereas errors in the timing of births may shift the trend. If these errors vary by the socio-economic background of the women, the differentials will also be affected.

### 6.2 Fertility Levels and Trends

Table 6.1 presents data on current and cumulative fertility by background characteristics of the women. The measure of current fertility presented is the total fertility rate, which is the sum of the age-specific fertility rates. It represents the average total number of births a hypothetical group of women would have at the end of their reproductive life if they were subject to these rates from age 15 to 49. The first two columns of Table 6.1 show total fertility rates for two 3-year periods (1981-83 and 1984-87), although the latter period covers almost four years, since it includes most of 1987 up to the date of the survey. The fourth column of Table 6.1 shows the total fertility rates for the 5-year period before the survey. The last column shows cumulative fertility in the form of the mean number of children ever born to women at the end of their reproductive period.

The data show a total fertility rate of 3.4 children per woman for the five-year period prior to the survey. Some idea of the magnitude of the fertility decline that Indonesia has been experiencing can be gained from comparing the total fertility rate with the mean number of children born to women 40-49 (5.4), a decline of two children per woman. Further evidence of a fertility decline is apparent in the drop from 4.3 children per woman in the 1981-1983 period to 3.3 children in the next 3-year period, a decline of 23 percent. This is an exceptionally steep rate of decline and the possibility that the data are affected by displacement of events in time or some other error of recall can not be ruled out (see discussion of Table 6.2). Regardless of the rate of decline, the data indicate that it has affected all women irrespective of their area of residence or education.

Table 6.1 Total fertility rates for calendar year periods and for the five years preceding the survey, and mean number of children ever born to women 40-49, by background characteristics, NICPS, 1987

		Mean number of				
Background characteristic	1981- 1983	1984 - 1987**	Percent decline 1981-83/ 1984-87	0-4 years before survey	children ever born to women aged 40-49	
Residence						
Urban	3.7	2.8	24	2.9	5.2	
Rural	4.5	3.6	20	3.7	5.5	
Region						
Java-Bali	3.8	3.0	21	3.1	5.0	
Outer Java-Bali I	4.9	3.7	24	3.8	6.2	
Outer Java-Bali II	5.4	4.1	24	4.4	6.3	
Province					. , , , , , , , , , , , , , , , , , , ,	
Jakarta	3.6	2.6	28	2.8	4.8	
West Java	4.5	3.4	24	3.6	5.8	
Central Java	3.9	3.1	21	3.2	5.2	
Yogyakarta	2.9	2.1	28	2.3	4.4	
East Java	3.4	2.6	24	2.7	4.1	
Bali	3.5	2.5	29	2.6	4.8	
Education						
None	4.4	3.7	16	3.8	5.2	
Some primary	4.6	3.7	20	3.8	5.9	
Primary completed	4.3	3.4	21	3.5	5.5	
Secondary or more	3.2	2.4	25	2.5	4.6	
Total	4.3	3.3	23	3.4	5.4	

<sup>\*</sup> Based on births to women 15-49 years of age

Table 6.1 also shows that fertility of urban women is lower than fertility of women in the rural areas (2.9 vs 3.7 in the five years before the survey), which is consistent with their greater use of family planning methods (see Chapter 4). Fertility of urban women declined slightly faster than fertility of rural women between the periods 1981-1983 to 1984-1987.

Regionally, Java-Bali has the lowest fertility, followed by Outer Java-Bali I and Outer Java-Bali II. For the five-year period before the survey, fertility in Java-Bali was 18 percent lower than in Outer Java-Bali I, and 30 percent lower than in Outer Java-Bali II. The pace of fertility decline was similar in the three regions. Comparing total fertility rates for the provinces in Java-Bali, one notices that Yogyakarta consistently maintains the lowest fertility. On the other hand, West Java has the highest fertility among all provinces in Java-Bali. There are only slight differences between provinces in the rate of fertility decline between 1981-83 and 1984-87.

Generally, there is an inverse relationship between fertility and education, that is, fertility decreases as education increases. However, this relationship does not hold for the women with no education, who have either the same level or lower fertility than women with some primary education. The decline over time, however, is positively related to the level of educational attainment; namely, better educated women have experienced a faster fertility decline than those who have less education. This is true for the decline in total fertility rates from 1981-83 to 1984-87, as well as for the decline evidenced by the difference between the mean number of children born to women 40-49 and the total fertility rate 0-4 years before the survey.

<sup>\*\*</sup> Includes 1987 up to the survey date

Cumulative fertility shows a similar pattern of differentials as the total fertility rates. Rural women, those who live in the Outer Java-Bali II region and in West Java, and women with some primary education have the highest fertility compared to women in other major groups.

Table 6.2 presents total fertility rates derived from various previous data sources for comparison with the NICPS data. Strictly speaking, the rates are not comparable, since they were collected under different circumstances, calculated using different methods, and refer to different time periods; however, they do provide a broad picture of the recent decline in Indonesian fertility. Several things are apparent from this table. First, the rate of 5.6 from the 1971 Census for 1967-70 is very similar to the average number of children born to women 40-49 (5.4) interviewed in the NICPS (Table 6.1); this is consistent since these women were at their peak childbearing ages in the late 60s. Second, the NICPS value for 1981-83 is suspect, since it is the only one that does not fit in the general pattern of decline. A more detailed analysis of the birth history data is needed to examine possible sources of error. Third, the pace of fertility decline appears to have increased somewhat in recent years.

Information from the 1976 Indonesia Fertility Survey was not included in Table 6.2, because it does not refer to the whole country, but rather to the Java-Bali region only. Data from the survey show a total fertility rate of 4.2 for 1975, which can be compared to the rate of 3.0 for 1984-87 for Java-Bali from the NICPS. The two rates indicate a decline of 29 percent over a period of about ten years. Since contraceptive use almost doubled during the same period (Table 4.2), a steep decline in fertility would be expected.

Table 6.3 presents age-specific fertility rates for five-year periods preceding the survey. In reading the table, one should note that the figures in parentheses represent partial fertility rates due to truncation.

Table 6.2	Total	fertility	rates	from	several
	source	es. Indones	sia		

Source	Period of fertility estimate	Total fertility rate	
1971 Census	1967-1970	5.5*	
1976 SUPAS	1971 - 1975	5.1*	
1980 Census	1976-1979	4.6*	
1980 Census	1980	4.3**	
1985 SUPAS	1981-1984	4.0*	
1987 NICPS	1981-1983	4.3***	
1985 SUPAS	1985	3.3**	
1987 NICPS	1984 - 1987	3.3***	

- Estimated using the Own Children method
- \*\* Calculated from data on date of last live birth
- \*\*\*Calculated directly from birth history data

Table 6.3 Age-specific fertility rates for five-year periods, by age of woman at birth, NICPS, 1987

		Number of years preceding survey							
Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34		
15-19	75	120	139	148	171	156	(127)		
20-24	189	236	260	275	268	(276)	-		
25-29	174	223	248	268	(291)	-	-		
30-34	130	170	213	(249)	-	-	-		
35-39	75	115	(150)	` - `	-	-	-		
40-44	32	(61)	-	-	-	-	-		
45-49	(10)	-	-	-		-	-		

Note: Figures in parentheses are partially truncated rates. Not available due to age truncation. Women 50 years and over were not included in the survey, and the farther back into time rates are calculated, the more severe is the truncation. For example, rates cannot be calculated for women aged 45-49 for the period 5-9 years before the survey, because those women would have been aged 50-54 at the time of the survey and were not interviewed. The table indicates two things; first, there is an obvious decline in fertility, and second, the decline has been faster in recent years.

# 6.3 Pregnancy Status

Table 6.4 presents the pregnancy status of currently married women, as it is an indication of immediate future fertility. In total, 7 percent of currently married women are pregnant. As expected, the rates decline with age. There does not seem to be much variation between urban and rural residents. Comparison between regions show an interesting picture, because the rates for women in the Outer Java-Bali II region are more than twice that in Java-Bali (12 vs. 6 percent). In Java, West Java shows the highest pregnancy rate at 7 percent, while Central Java has the lowest rate at 4 percent. These figures parallel the pattern of fertility in Java, in which West Java is highest.

There is a positive association between pregnancy status and education, that is, the higher the education level, the higher the percent of women who are pregnant. Higher percentages for women with more education could be due to the fact that many of these women are young and are thus in the prime childbearing years. The last panel shows that 23 percent of currently married childless women are pregnant. The pattern of pregnancy status by number of living children is similar to that by age, in other words, younger, lower parity women are more likely to be pregnant.

Table 6.4 Percent of currently married women who were pregnant at time of survey, by background characteristics, NICPS, 1987

Background characteristic	Percent preg- nant
Age	
15-19	19.7
20-24	12.9
25-29	8.4
30-34	5.2
35-39	4.2
40-44	0.8
45-49	0.2
Residence	
Urban	6.1
Rural	7.1
Region	
Java-Bali	5.6
Outer Java-Bali I	8.9
Outer Java-Bali II	12.2
Total	6.8

Background characteristic	Percent preg- nant
Province Jakarta West Java Central Java Yogyakarta East Java Bali	5.8 7.0 4.4 5.2 5.2 5.2
Education None Some primary Primary completed Secondary or more	5.1 6.9 7.7 7.9
Number of living children None 1 2 3 4 or more	22.8 8.8 4.9 4.7 3.4

### 6.4 Children Ever Born

Table 6.5 shows the distribution of all, ever-married, and currently married women by the number of children they have given birth to. Since marriage in Indonesia is almost universal and marital dissolution is usually followed by remarriage, differences between the three groups of women are small from the middle age groups on.

The table shows that 9 percent of women 15-19 and 55 percent of women 20-24 have had at least one child. Childlessness by age 40 or above can be taken as evidence of the extent of primary infertility which in the NICPS represents less than 5 percent of ever-married women. It is interesting to note that of women aged 45-49, 11 percent have had 10 or more births, around 30 percent have had 8 or more, and over 60 percent have had 5 or more births.

The last column in Table 6.5 displays the mean number of children ever born by women's age, which increases among older women. Among all women the range is from 0.1 births for women 15-19 to 5.6 births for women 45-49.

Table 6.6 shows the mean number of children ever born to ever-married women by age at first marriage and number of years since marriage. The data in each column display the expected pattern, namely that women have more children with longer duration of marriage. Thirty years after first marrying these women have an average cumulative fertility of about 6 children.

The effect of later age at marriage is indicated by the figures in the last line of Table 6.6; women who marry young tend to have more children than those who marry later. These data, however, are

Table 6.5 Percent distribution of all, ever-married, and currently married women by number of children ever born and mean number of children ever born, according to age, NICPS, 1987

				Number	of chil	.dren ev	er borr	1					Num- ber	Mean number
Age	None	1	2	3	4	5	6	7	8	9	10+	Total	of women	ever born
All Wom	nen*													
15-19	91.0	7.5	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3342	0.11
20-24	44.6	26.3	20.5	6.3	2.0	0.3	0.0	0.0	0.0	0.0	0.0	100.0	3066	0.96
25-29	15.5	18.1	26.8	21.1	11.4	4.9	1.5	0.5	0.2	0.0	0.0	100.0	2818	2.20
30-34	8.9	8.3	15.6	22.7	17.9	12.3	8.4	2.9	1.8	0.9	0.3	100.0	2200	3.37
35 - 39	7.2	6.2	12.1	15.0	15.8	13.1	11.7	7.8	5.4	3.2	2.5	100.0	1742	4.27
40-44	5.0	6.0	7.4	10.9	11.5	14.1	12.4	10.3	10.0	6.1	6.3	100.0	1445	5.19
45-49	6.1	5.0	7.1	8.5	10.7	11.3	11.6	10.4	11.4	7.1	10.8	100.0	1523	5.61
Total	33.0	12.5	13.6	11,4	8.6	6.4	4.9	3.2	2.8	1.7	1.9	100.0	16136	2.50
Ever-Ma	rried Wo	omen	I	<b>L</b>	L	<b></b>	L					L		
15-19	52.6	39.2	7.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	635	0.57
20-24	15.0	40.3	31.5	9.6	3.1	0.5	0.0	0.0	0.0	0.0	0.0	100.0	1998	1.47
25-29	5.5	20.2	30.0	23.5	12.7	5.5	1.7	0.6	0.2	0.1	0.0	100.0	2520	2.45
30-34	5.0	8.6	16.3	23.7	18.7	12.8	8.8	3.0	1.9	1.0	0.2	100.0	2110	3.51
35-39	4.3	6.4	12.4	15.5	16.3	13.6	12.0	8.0	5.6	3.3	2.6	100.0	1690	4.41
40-44	4.0	6.0	7.5	11.0	11.6	14.3	12.5	10.4	10.2	6.1	6.4	100.0	1430	5.25
45-49	4.7	5.1	7.2	8.6	10.9	11.5	11.7	10.6	11.5	7.2	11.0	100.0	1501	5.69
Total	9.1	17.0	18.5	15,5	11.6	8.6	6.6	4.4	3.9	2.3	2.5	100.0	11884	3.40
Current	ly Marr	ied Wom	en											
15-19	51.3	40.2	7.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	600	0.58
20-24	14.0	40.1	32.1	9.9	3.3	0.5	0.1	0.0	0.0	0.0	0.0	100.0	1888	1.50
25-29	4.9	19.1	30.1	24.4	13.2	5.7	1.7	0.6	0.2	0.1	0.0	100.0	2406	2.51
30-34	4.3	7.2	15.9	24.3	19.3	13.4	9.2	3.1	2.0	1.0	0.3	100.0	1979	3.61
35-39	3.8	5.6	12.0	15.4	16.6	14.1	12.2	8.4	5.6	3.3	3.0	100.0	1543	4.49
40-44	4.0	5.3	7.0	10.6	10.9	14.5	13.3	10.5	10.5	6.2	7,2	100.0	1271	5.37
45-49	4.5	4.5	6.2	7.6	9.3	11.7	12.2	12.1	12.3	7.7	11.9	100.0	1220	5.91
Total	8.6	16.6	18.7	15.9	11.6	8.8	6.7	4.5	3.8	2.2	2.6	100.0	10907	3.42

<sup>\*</sup> Derived by applying a multiplication factor based on the household questionnaire to the individual respondents

influenced by the fact that women who married before age 15 tend to be older and therefore have had more time to have more children. Within each duration category, the pattern is mixed, generally rising, then falling with age at marriage. This may reflect in part, some adolescent infecundity of those who married in their teen-age years. Differences are small at shorter marriage durations, but for the longer durations, there is some evidence that women who marry later have fewer children.

Table 6.6 Mean number of children ever born to ever-married women, by age at first marriage and years since first marriage, NICPS, 1987

w	Age at first marriage										
Years since first marriage	Less than 15	15-17	18-19	20-21	22-24	25 or over	All ages				
0-4	0.7	0.7	0.8	1.0	0.8	0.8	0.8				
5-9	1.7	2.1	2.2	2.3	2.2	1.9	2.1				
10-14	2.7	3.1	3.5	3.1	3.1	3.0	3.1				
15-19	3.6	4.3	4.3	3.5	4.2	2.7	4.0				
20-24	4.5	5.2	5.0	5.3	4.7	4.3	4.9				
25-29	5.0	5.8	5.3	5.3	4.8	- 1	5.4				
30 or more	5.8	6.2	6.0	-	-	-	5.9				
Total	4.0	3.6	3.0	2.8	2.5	2.0	3.4				

# 6.5 Age at First Birth

Table 6.7 presents the percent distribution of all women (including single women) by current age and age at first birth. Figures for younger women should be used with caution, since many have not yet married and thus have not had a chance to have children. Comparing women 25 years of age and overby which time most have married--the table shows that the percentage of women who gave birth before age 15 decreased from 10 percent of women 45-49 to 5 percent of women 25-29. The proportion of women giving birth at ages 15-17 also declined among younger women.

Table 6.7 Percent distribution of all women by age at first birth according to current age, NICPS, 1987

			Age		Number	Median				
Current age	No births	Less than 15	15-17	18-19	20-21	22-24	25 or over	Total	of women	age at first birth
15-19	91.0	1.0	5.4	2.6	-	-	•	100.0	3342	-
20-24	44.6	2.8	16.6	18.6	12.9	4.5	- '	100.0	3066	-
25-29	15.5	5.1	22.0	21.4	16.5	13.7	5.8	100.0	2818	20.2
30-34	8.9	6.2	23.9	21.0	15.2	14.7	10.1	100.0	2200	19.9
35-39	7.2	8.6	25.1	20.0	14.8	14.2	10.1	100.0	1742	19.6
40-44	5.0	9.2	27.5	19.9	16.0	13.3	9.1	100.0	1445	19.3
45-49	6.1	9.6	23.0	19.0	15.6	14.0	12.7	100.0	1523	19.8
Total	33.0	5.1	18.7	16.4	11.9	9.3	5.6	100.0	16136	-

Note: Table is based on all women, including the never-married, who are assumed to have had no births. Median age is defined as the age at which 50 percent of women had a birth.

The last column in Table 6.7 shows that, except for women 45-49, the median age at first birth has increased among younger women. Given the increase in age at marriage (see Chapter 2), this increase in age at first birth is not surprising. The high median age for women 45-49 should be viewed carefully because older women may not accurately recall dates of their births.

A more complete picture of differentials in median age at first birth is presented in Table 6.8. The differentials in age at first birth seem to be associated with those in age at first marriage (see Chapter 2), and with fertility (see previous tables in this chapter). Urban women, those who live in Jakarta, Yogyakarta, and Bali, and women with more education, tend to marry later, have their first birth at a later age, and have lower fertility rates.

Table 6.8 Median age at first birth among all women 25-49 years, by current age and background characteristics, NICPS, 1987

n	Current age								
Background characteristic	25-29	30-34	35-39	40-44	45-49	Total			
Residence									
Urban	21.7	21.1	20.5	20.3	20.4	20.9			
Rural	19.6	19.5	19.1	19.0	19.7	19.4			
Region			**						
Java-Bali	19.9	19.6	19.4	19.1	19.8	19.7			
Outer Java-Bali I	21.3	20.5	19.9	19.5	19.9	20.3			
Outer Java-Bali II	20.5	21.0	20.4	20.4	20.1	20.5			
Province									
Jakarta	22.3	21.8	21.7	20.8	21.2	21.7			
West Java	19.4	18.7	18.6	18.1	18.8	18.8			
Central Java	20.0	19.7	19.4	19.1	20.1	19.8			
Yogyakarta	21.8	21.2	21.7	20.9	21.6	21.5			
East Java	19.5	19.8	19.5	19.9	19.9	19.7			
Bali	20.8	20.6	20.8	21.1	22.7	21.0			
Education									
None	19.8	19.5	19.2	19.3	19.7	19.6			
Some primary	19.2	19.0	18.9	18.4	19.5	19.0			
Primary completed	20.1	19.6	19.2	19.6	19.8	19.7			
Secondary or more	24.9	23.4	23.5	22.5	22.6	23.7			
Total	20.2	19.9	19.6	19.3	19.8	19.8			

# 7. FERTILITY PREFERENCES

This chapter addresses questions which allow an assessment of the need for contraception, acceptance of the two-child family norm, and the extent of unwanted fertility. The questions concern whether the respondent wants more children; if so, how long she would prefer to wait before the next child; and if she could start afresh, how many children in all she would want. Two other issues are examined here as well--the extent to which unwanted or mistimed births occur and the effect that the prevention of such births would have on fertility rates. Since an underlying rationale of the Indonesian family planning program is to persuade couples to have only two children and to space them five years apart, it is important to gauge to what extent these fertility preferences have been adopted.

Survey questions on fertility preferences have been criticized on the grounds that answers reflect unformed, ephemeral views, which are held with little conviction, and that they do not take into account the effect of social pressures or the attitudes of other family members, particularly the husband, who may exert a major influence on reproductive decisions. The first objection probably has little relevance in Indonesia, where widespread public exposure to the family planning program has probably caused most people to establish their opinions regarding fertility regulation prior to the interview. The second objection is correct in principle, however, evidence from surveys in which both husbands and wives are interviewed suggests that there are generally no major differences between the views of the two sexes.

It should be noted that women who were pregnant at the time of interview were asked if they wanted more children after the one they were 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. Women who have been sterilized also require special analytic treatment. The strategy is to classify them as wanting no more children. The validity of this assumption can be ascertained by referring to the proportions sterilized who regret their sterilizations because they want more children (Table 7.1).

Table 7.1	Percent distribution of currently married women by desire for children and the	
	certainty of their preference, according to number of living children, NICPS, 1987	,

		Nur	mber of l	living ch	nildren '	•			
Desire for children and certainty of preference	None	1	2	3	4	5	6+	Total	
Have another:	***								
Definitely	81.8	81.1	45.5	21.4	9.8	7.8	3.5	37.8	
Not sure	3.7	3.5	3.6	3.3	2.4	2.1	1.1	2.9	
Undecided:									
Inclined to have another	0.5	0.6	1.1	1.3	1.1	0.9	0.2	0.8	
Inclined not to have another	0.3	0.2	0.7	0.4	1.1	0.3	0.4	0.5	
Not sure	2.7	1.5	4.9	5.1	3.7	4.8	3.7	3.8	
Have no more:									
Not sure	0.2	1.7	6.1	9.7	10.6	8.6	7.0	6.3	
Definitely have no more	4.8	9.6	34.8	53.1	62.2	63.1	69.7	41.3	
Sterilized:									
Regret, Want another child	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	
Regret, want no more, unsure	0.0	0.0	0.1	0.0	0.0	0.1	0.4	0.1	
Do not regret	0.0	0.3	1.2	3.7	5.3	5.5	7.3	3.0	
Data missing	0.0	0.0	0.1	0.1	0.0	0.4	0.3	0.1	
Oeclared infecund	6.0	1.5	1.8	1.8	3.8	6.4	6.4	3.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of women	813	2157	2320	1862	1363	890	1502	10907	

<sup>\*</sup> Includes current pregnancy

### 7.1 Desire for Additional Children

Table 7.1 displays the distribution of currently married women by desire for children and the certainty of their preference, according to the number of living children. The last column indicates that slightly fewer women definitely want another child than definitely want no more, though both categories are close to 40 percent. The remaining 20 percent are composed primarily of 14 percent who are unsure, as well as six percent who are either infecund or sterilized.

Data in the first row suggest the extent of acceptance of the two-child family norm in Indonesia. Over 80 percent of women with no children or one child definitely want another child, while less than half of those with two children do. It is interesting to note that the proportions definitely desiring more children roughly halve with each additional child for women with one, two, three and four children--in these groups the rates drop from 81 to 46 to 21 to 10 percent, respectively. The sharp reduction after the second child suggests widespread agreement with the two-child family norm. However, the data indicate that many women still desire more than two children. The table also shows that only a tiny fraction of sterilized women regret having the operation.

Table 7.2 is similar to Table 7.1 except that the fertility preference classification is simplified and women wanting another birth are grouped according to when they want their next birth. The table allows the potential need for contraceptive services--for spacing as well as limiting births--to be examined.

Over one-half of married women in Indonesia do not want any more children or have been sterilized (Figure 7.1). An additional 27 percent wish to delay their next birth for two or more years. Summing these two figures indicates that 78 percent of women are potentially in need of family planning services either to delay or limit births. Less than 10 percent of women want another child within two years and 9 percent are undecided either about whether or when to have another child. An additional 3 percent of women stated that they were infecund.

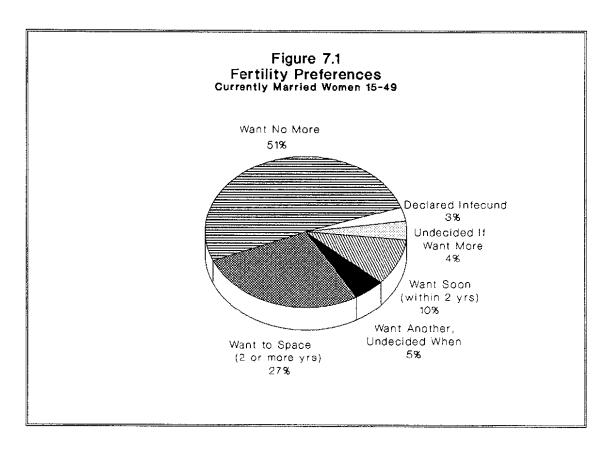
Table 7.2	Percent distribution of currently married women by desire for children, according	
	to number of living children. NICPS. 1987	

	Number of living children*							
Desire for children and timing	None	1	2	3	4	5	6+	Total
Have another within 2 years	48.9	15.4	8.7	4.4	1.9	1.6	0.6	9.7
Have another after 2 or more years	17.1	61.2	37.7	19.0	9.9	6.9	2.6	26.8
Have another, undecided when	19.9	8.5	3.9	2.6	1.5	2.3	1.5	5.0
Undecided**	2.7	1.5	4.9	5.1	3.7	4.8	3.7	3.9
Want no more/sterilized	5.4	11.9	43.0	67.1	79.2	78.0	85.2	51.3
Declared infecund	6.0	1.5	1.8	1.8	3.8	6.4	6.4	3.3
Total Number of women	100.0 813	100.0	100.0	100.0 1862	100.0 1363	100.0 890	100.0 1502	100.0
Number of Wollen	013	2137	2320	1002	1303	070	1302	10907

<sup>\*</sup> Includes current pregnancy

As shown in Figure 7.2 and Table 7.2, desire for additional children is strongly related to the number of living children. Almost all childless women want to have a child at some time and half of them want a child soon (within two years). While most women with one child also want another, the majority want to wait two or more years. Among women with two children, half want another child and the other half either do not want more, are undecided, or are infecund. Among women with four or more children, at least 80 percent want to stop childbearing.

<sup>\*\*</sup> Includes only women listed as "Undecided, not sure" in Table 7.1.



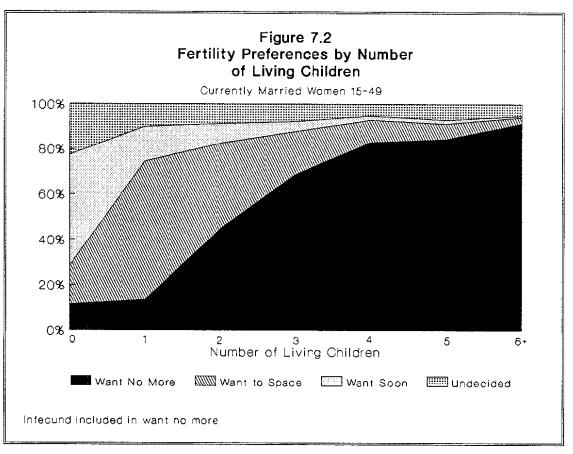


Table 7.3 shows the distribution of women by desire for children, according to age category. It indicates that older women are much more likely to want no more children than are younger women. The desire to space children is concentrated among younger women. Sixty percent of women 15-24 want to delay having their next child.

Table 7.4 shows the percent of women who want no more children by background characteristics. Urban women are generally more likely than rural women to want no more children (58 percent and 49 percent, respectively), and the urban-rural differential increases with the number of living children; while the proportion of urban women who want no more children is only slightly higher than that for rural women among childless women, it is considerably higher among women with four or more children.

Table 7.3 Percent distribution of currently married women by desire for children, according to age, NICPS, 1987

	Age							
Desire for children and timing	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total
Have another within 2 years	18.0	13.0	13.1	9.4	7.8	4.9	1.8	9.7
Have another after 2 or more years	60.7	59.5	39.0	18.5	6.7	2.4	0.0	26.8
Have another, undecided when	13.9	6.3	5.8	4.3	4.2	3.4	1.2	5.0
Undecided *	1.9	3.5	3.8	5.3	4.2	4.0	1.7	3.8
Want no more/sterilized	5.5	17.7	38.2	62.3	76.1	78.8	74.3	51.4
Declared infecund	0.0	0.0	0.1	0.2	1.0	6.5	21.0	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	600	1888	2406	1979	1543	1271	1220	1090

<sup>\*</sup> Includes only women listed as "Undecided, not sure" in Table 7.1.

Table 7.4 Percentage of currently married women who want no more children by number of living children and background characteristics, NICPS, 1987

Baskanavad	Number of living children *						
Background characteristic	None	1	2	3	4+	Total	
Residence							
Urban	6.9	12.4	46.3	74.8	90.3	58.3	
Rural	4.8	11.7	41.9	63.8	77.7	48.7	
Region							
Java-Bali	6.3	13.9	50.9	76.1	89.3	55.0	
Outer Java-Bali I	2.8	6.5	26.3	46.6	69.9	44.1	
Outer Java-Bali II	0.0	4.1	16.6	50.4	<b>73.</b> 0	43.8	
Province		Ì					
Jakarta	3.8	13.1	47.9	78.8	92.5	58.4	
West Java	2.9	9.5	43.1	69.0	84.2	50.6	
Central Java	4,5	14.4	50.2	73.6	92.5	56.6	
Yogyakarta	3.1	9.2	57.3	85.4	84.0	57.7	
East Java	10.9	17.9	55.7	83.0	<b>92.</b> 0	55.7	
Bali	3.4	15.0	72.9	84.5	90.7	67.6	
Education		İ	1				
None	14.5	26.2	49.1	59.9	74.6	55.8	
Some primary	3.2	12.3	37.8	65.0	82.2	51.4	
Primary completed	2.5	7.5	42.3	70.9	84.3	48.2	
Secondary or more	0.4	4.8	50.7	76.4	90.4	49.1	
Total	5.4	11.9	43.0	67.1	81.3	51.3	

Note: Sterilized women are included as wanting no more children.

Includes current pregnancy

Women in Java and Bali are leading the transition to smaller family preferences in Indonesia. While half of the women with two children in Java and Bali want no more children, the proportions in Outer Java-Bali I and II are 26 and 17 percent. At other parities, a larger proportion of women in Java and Bali also want to stop childbearing, though the differences are not as dramatic as those for women with two children.

Among the provinces in Java-Bali, Balinese women stand out as more widely adopting a two-child norm than women in the other provinces. Where nearly three-quarters of Balinese women are ready to stop childbearing after two children, only about half of women in the other provinces are ready to do so.

There is an odd twist in the data on proportions wanting no more children by education. In general, women who have completed primary or secondary education are more likely to want to continue childbearing than are less educated women. The data by number of living children, however, indicate that at parities above two, the standard patterns are observed--those with higher levels of education are generally less likely to want more children.

## 7.2 Future Need for Family Planning

Table 7.5 shows the percentage of currently married women who are in need of family planning (i.e., who are not using contraception and who either want no more children or want to delay their next birth for two or more years) as well as those in need who intend to use family planning. These are tabulated by background characteristics. Among those in need, the table distinguishes between those in need because they want no more children (limiters) and those who want to postpone their next birth (spacers).

Table 7.5 Percentage of currently married women who are in need of family planning and the percentage who are in need and intend to use family planning in the future, by background characteristics, NICPS, 1987

		In need*		In need	and intend	to use
Background characteristic	Wants no more	Wants to postpone**	Total	Wants no more	Wants to postpone**	Total
Residence						
Urban	21.2	14.3	35.4	5.3	5.9	11.2
Rural	21.5	21.8	43.4	5.8	8.1	13.9
Region						
Java-Bali	22.1	16.8	38.9	5.1	6.3	11.4
Outer Java-Bali I	19.9	25.3	45.2	6.4	9.2	15.6
Outer Java-Bali II	21.6	28.8	50.4	8.9	15.6	24.5
Province						
Jakarta	21.4	14.0	35.4	5.1	4.5	9.6
West Java	24.7	17.8	42.5	5.2	7.3	12.4
Çentral Java	20.6	18.2	38.8	5.4	6.7	12.1
Yogyakarta	11.0	7.3	18.3	4.6	3.8	8.4
East Java	22.7	16.9	39.6	4.8	5.6	10.4
Bali	14.4	7.9	22.3	6.7	4.7	11.4
Education						
None	33.1	19.1	52.2	3.8	4.3	8.1
Some primary	21.7	20.6	42.3	6.4	7.7	14.1
Primary completed	16.1	20.5	36.5	6.2	9.4	15.7
Secondary or more	11.1	17.1	28.2	5.4	8.7	14.1
Total	21.4	19.8	41.2	5.7	7.5	13.2

Includes women who are not contracepting and who either want no more births or want to postpone their next birth for two or more years

<sup>\*\*</sup> Includes women undecided about whether to have another birth or undecided about timing for next birth

Overall, 41 percent of currently married women in Indonesia are in need of family planning. Slightly over half of them want no more children, while slightly under half want to space their next child. Only one-third of those in need intend to use family planning in the future and the proportion who intend to use is greater among spacers than among those who want no more children.

A larger proportion of rural than urban women are in need, primarily because of the greater desire for spacing births. Of those who are in need, the proportion who intend to use is almost identical for urban and rural women--one-third.

A larger proportion of women outside Java-Bali are in need of family planning, again due mostly to the greater desire for spacing children. The proportion of women in need who intend to use is greatest in Outer Java-Bali II, followed by Outer Java-Bali I and then, Java-Bali. Among the provinces in Java and Bali, the three main provinces, West, Central, and East Java report the highest percentages of women in need. Yogyakarta and Bali report proportions in need that are only half as large.

The most notable difference in this table is the proportions in need between high and low educational groups. Nearly twice the proportion of those with no education are classified in need (52 percent) as those with a secondary school education (28 percent); and a substantially smaller percentage of women in the no education group intend to use, than in the other education groups (8 percent vs. 14 to 16 percent.)

#### 7.3 Ideal Number of Children

Table 7.6 shows the distribution of ever-married women by ideal number of children, according to the actual number of living children they have. Also tabulated are the mean ideal numbers of children for both ever-married and currently married women. In the discussion of desire for additional children, interest focused on the respondent's wishes for the future, implicitly taking into account the number of children that she already has. In ascertaining the ideal number of children, the respondent is asked to perform the more difficult task of considering--abstractly and independently of her actual family size--the number of children she would choose to have if she could start again. Some women have difficulty in answering this question, and the fact that 13 percent gave non-numerical answers ("as many as God gives me," "don't know") is evidence of this. The proportion giving non-numeric answers increases with the number of living children.

Table 7.6 Percent distribution of ever-married women by ideal number of children and mean ideal number of children for ever-married women and currently married women, according to number of living children, NICPS, 1987

	Number of living children *							
Ideal number of children	None	1	2	3	4	5	6+	Total
None	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
1	5.2	4.7	0.7	1.1	0.8	0.6	0.4	1.9
2	54.2	51.5	39.4	17.0	17.8	16.1	12.4	31.1
2 3	17.7	22.3	27.5	38.4	14.1	15.2	14.2	23.1
4	9.9	11.1	16.4	22.8	37.7	15.2	20.1	18.9
4 5	1.3	2.8	5.1	6.1	8.8	21.1	8.2	6.6
6 or more	1.6	1.1	2.2	3.3	6.7	11.1	17.3	5.4
Non-numeric response	10.1	6.5	8.7	11.2	14.1	20.7	27.4	13.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of women	982	2383	2497	2005	1464	951	1602	11884
Mean ideal number (ever-married women)	2.5	2.6	2.9	3.3	3.7	4.0	4.4	3.2
Mean ideal number (curr. married women)	2.5	2.6	2.9	3.3	3.7	4.1	4.4	3.2

<sup>\*</sup> Includes current pregnancy

The data in Table 7.6 indicate the large number of women who regard the two-child family as ideal. For women with no children, the proportion is 54 percent and for women with one child the proportion is 52 percent. Among women with more than one child, however, the numbers drop off sharply.

There is a correlation between actual and ideal number of children, which can be seen in the fact that the mean ideal number of children increases from 2.5 among childless women to 4.4 among women with six or more children. There are three reasons for this pattern. First, to the extent that women implement their preferences, those who want larger families will tend to achieve larger families. Second, women who already have large families may find it difficult to admit that they would not have some of their children if they could start again. Such women may report their actual number of children as their ideal. Finally, it is also possible that women with large families, being on average older than women with small families, have larger ideal sizes because they are more likely to hold traditional family size preferences than are younger women.

Despite the likelihood that some rationalization occurs, respondents frequently state ideal sizes lower than their actual number of surviving children, which can be taken as an indicator of surplus or unwanted fertility. At three and higher numbers of surviving children, the proportions of women stating ideal family sizes smaller than their own becomes sizable. In fact, among women with five or more children, half say that if they could live their lives again they would have fewer children.

Table 7.7 reports the mean ideal number of children for ever-married women by age group and background characteristics. Family size preferences vary across cohorts, ranging from a low of 2.6 children for women aged 15-19 to a high of 3.8 for women aged 45-49. The differences in ideal family size between urban and rural areas are not dramatic, differing by only 0.2 children. The differences between regions are much more substantial, from a low of 2.9 children in Java and Bali to 3.9 children in Outer Islands I. Even within Java-Bali there are some notable differences, with women in Bali reporting a mean ideal of 2.5 children, compared to 3.0 for Jakarta, West Java, and Central Java. Surprisingly, the differences by educational level are not as dramatic as the differences among regions, though women who have completed primary school do prefer smaller families than uneducated women.

Table 7.7 Mean ideal number of children for ever-married women by age and background characteristics, NICPS, 1987

Age								
Background characteristic	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Total
Residence Urban Rural	2.5 2.6	2.8 2.9	2.9 3.1	3.2 3.3	3.1 3.5	3.5 3.6	3.6 3.8	3.1 3.3
Region Java-Bali Outer Java-Bali I Outer Java-Bali II	2.4 2.8 3.2	2.6 3.4 3.5	2.8 3.6 3.6	3.0 4.0 3.9	3.0 4.3 4.0	3.1 4.6 4.0	3.4 4.7 4.2	2.9 3.9 3.7
Province Jakarta West Java Central Java Yogyakarta East Java Bali	2.4 2.5 2.4 2.3 2.4 2.1	2.7 2.8 2.7 2.4 2.5 2.2	2.9 3.1 2.9 2.5 2.6 2.5	3.0 3.0 3.0 2.6 2.9 2.6	3.2 3.1 3.1 2.8 2.9 2.7	3.3 3.1 3.4 3.1 2.9 2.7	3.5 3.4 3.4 3.1 3.3 2.9	3.0 3.0 3.0 2.7 2.8 2.5
Education None Some primary Primary completed Secondary or more	2.9 2.8 2.4 2.3	2.8 3.0 2.8 2.6	3.2 3.2 3.0 2.7	3.3 3.5 3.2 3.0	3.4 3.5 3.2 3.1	3.5 3.8 3.5 3.3	3.7 3.9 3.8 3.6	3.4 3.4 3.0 2.9
Total	2.6	2.9	3.1	3.3	3.4	3.6	3.8	3.2

## 7.4 Unplanned and Unwanted Fertility

In the NICPS, women who had births in the five years before the survey were asked whether the births were planned, unplanned but wanted at a later time, or unwanted. The answers to these questions provide an indication 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. It should be noted that the questions may be difficult for the respondent to answer, since they require her to recall her wishes at one or more points in the last five years and to report them honestly. Despite these potential problems of comprehension, recall and truthfulness, results in Table 7.8 indicate that respondents are willing to report unwanted pregnancies although the results probably underestimate the level of unwanted fertility.

Table 7.8	Percent distribution of births in the last five years and current
	pregnancies by contraceptive practice and planning status, according
	to birth order, NICPS, 1987

Contraceptive practice and planning status	1	2	3	4+	Total
Non-contraceptive interval Wanted child then Wanted child later Child not wanted	86.4 4.8 0.2	53.5 9.1 0.5	46.3 9.8 1.9	42.6 16.6 7.7	56.8 10.7 3.3
Contraceptive interval Wanted child then Wanted child later Child not wanted	5.8 0.6 0.0	28.3 7.5 0.5	27.6 11.0 2.2	16.7 10.1 5.7	18.3 7.2 2.6
Unclassifiable	2.2	0.6	1.2	0.6	1.1
Total Number of births	100.0 2288	100.0 1990	100.0 1513	100.0 2990	100.0 8943

The data show that three out of four pregnancies resulting in live births were wanted at the time of conception and that a further 18 percent were wanted but at a later time. Only 6 percent were not wanted at all. The proportion of births that are either unwanted or mistimed increases substantially with birth order. While less than 1 percent of first births were not wanted and only 5 percent were mistimed, 13 percent of fourth and higher births were unwanted and 27 percent were mistimed.

Table 7.9 presents the percentage of women who had a birth in the year before the survey according to whether the birth was planned, mistimed or unwanted. Similar to the five-year results in Table 7.8, 73 percent of the births were wanted when they occurred, 21 percent were mistimed, and 6 percent were unwanted at all. The proportions of births that were mistimed and unwanted are greater for third and higher births than for first and second births.

Using the data on whether births were wanted or not (and ignoring whether they were mistimed), it is possible to calculate a total "wanted" fertility rate in the same manner as conventional age-specific fertility rates, except that the births classified as unwanted are omitted from the numerator. The resulting wanted fertility rates are analogous to conventional total fertility rates. They express the level of fertility that theoretically would result if all unwanted births were prevented. Comparison of actual rates with wanted rates indicates the potential demographic impact of the elimination of unwanted births.

The total wanted fertility rate may be interpreted as the number of wanted births that a woman would bear by the end of her childbearing years, if she experienced the wanted fertility rates observed for the last five years. In many ways, this is probably a better measure of desired fertility than answers to the direct question on ideal number of children. It is more firmly grounded in reality, because answers of

Table 7.9 Percentage of women who had a birth in the last 12 months by fertility planning status and birth order NICPS, 1987

Contraceptive practice and planning status	Birth		
	1-2	3+	Total
Wanted child then	86.0	60.5	72.8
Wanted child later	13.3	27.3	20.6
Wanted no more children	0.5	11.5	6.2
Not classifiable	0.2	0.7	0.4
Total	100.0	100.0	100.0
Number of births	790	855	1645

respondents presumably take into account the balance of sons and daughters already born, while ideal family size responses may assume an ideal distribution of sons and daughters. Another difference between the two measures is that the wanted fertility rate which takes observed fertility as its starting point, can never be larger than the actual total fertility rate, while ideal family size can and often is larger than the number of children born. The total wanted fertility rate may be the more realistic measure, because it takes into account the fact that fecundity impairment prevents some women from achieving their desired family size. But it has the disadvantage of being difficult to interpret.

Overall, as shown in Table 7.10, the wanted total fertility rate is only about 10 percent lower than the actual total fertility rate. Thus, if unwanted births could be eliminated, Indonesian fertility would average just over three children per woman. Differentials in wanted fertility rates are similar to those for actual fertility rates, except that they are all slightly lower.

Table 7.10 Total wanted fertility rates and total fertility rates for the five years preceding the survey by background characteristics, NICPS, 1987

Background characteristic	Wanted total fertility rate	Actual total fertility rate
Residence Urban Rural	2.6	2.9 3.7
Region Java-Bali Outer Java-Bali I Outer Java-Bali II	2.7 3.6 4.2	3.1 3.8 4.4
Province Jakarta West Java Central Java Yogyakarta East Java Bali	2.6 3.1 2.8 2.0 2.5 2.3	2.8 3.6 3.2 2.3 2.7 2.6
Education None Some primary Primary completed Secondary or more	3.5 3.5 3.2 2.4	3.8 3.8 3.5 2.5
Total	3.1	3.4

# 8. MORTALITY AND HEALTH

## 8.1 Background

The government of Indonesia has paid substantial attention to the high infant and child mortality prevailing in the country. Various measures have been taken to enhance the health status of the people, particularly children under five. In the government's policy formulation, the infant mortality rate is cited as an indicator of the people's welfare.

Lacking data from the registration system, infant mortality rates and other mortality indices have traditionally been computed indirectly from census and survey data, using information on the proportion of dead children among all births, presented by age of mother. This method was introduced by Brass (1968), and modified by other demographers (Sullivan, 1972; Trussell, 1975). The method relies on data that are relatively easily collected and reliably reported; however, the transformation of these data into mortality estimates requires several assumptions about the patterns of fertility and mortality that are often difficult to accommodate. This method has often been used in presenting mortality estimates from previous data sources in Indonesia (CBS, 1984; CBS, 1988) and elsewhere.

# 8.2 Trends in Infant and Childhood Mortality

The infant and childhood mortality rates presented in this report were calculated directly from birth history data given by each respondent for all of her live births. First, the respondent was asked the number of sons and daughters living with her in the same household, the number living away, and the number who had died. These questions were aimed at obtaining the total number of births the respondent had experienced.

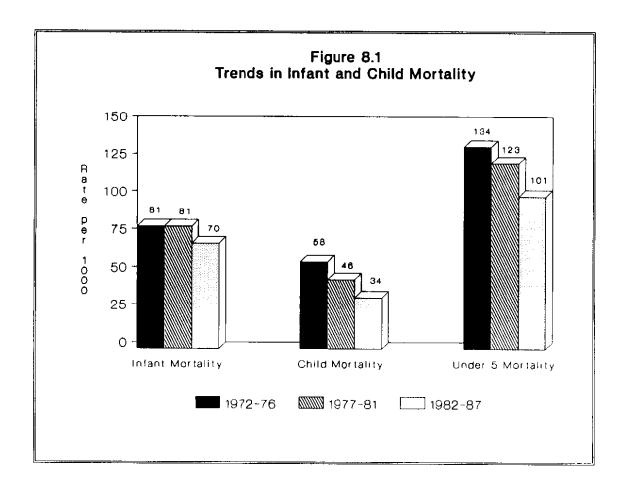
Next, the respondent was asked to give information on each of the children she had given birth to, including the name, sex, and whether the child was still alive. If the child had died, the age of death was recorded. If the child was still living, information about his/her age at last birthday and whether the child lived with his/her mother was asked. As mentioned in Chapter 6, birth histories are often subject to inaccuracies in the reporting of events which can result in biased rates and/or false trends over time. Despite these potential disadvantages, they provide data for analyses that would be impossible with most other types of data collection formats.

Table 8.1 and Figure 8.1 show the downward trend in infant and childhood mortality in Indonesia over the past 15 years. The data are presented for three five-year periods. The rates were computed on the basis of calendar years, thus, the period 1977-1981 includes cases from 1 January 1977 through 31 December 1981. However, the calendar period 1982-1987 covers more than a five and a half year period

Table 8.1 Infant and childhood mortality for five-year periods, NICPS, 1987

Period		Childhood mortality rate (4q1)	
1972-1976	80.7	58.1	134.2
1977-1981	80.5	45.9	122.7
1982-1987*	70.2	33.5	101.3

<sup>\*</sup> Includes calendar year 1987 up to the month preceding the date of interview.



from 1 January 1982 through about 30 October 1987, because roughly 50 percent of the interviews were completed in October 1987. The probability of dying before age 5 (5q0) was computed using the 1q0 and 4q1 values.

The table shows that both infant and childhood mortality rates declined slowly from 1972-1976 to 1977-1981, and gained speed in the next five years. Childhood mortality declined faster than infant mortality (42 percent versus 13 percent). The infant mortality rate for the period 1982-1987 (70 per 1000 births) is almost identical to the rate of 71 calculated indirectly from the 1985 SUPAS (see Chapter 1).

# 8.3 Mortality Differentials

In Table 8.2 the infant and childhood mortality rates are presented for various socioeconomic characteristics of the mother. In order to ensure a sufficient number of events, the rates were computed for the ten-year period 1977-1987, and thus indicate an average for that period. Overall, of 1000 births, more than 110 children did not reach their fifth birthday, and 75 did not live to one year of age.

Mortality of children under 5 is substantially lower in urban areas than in rural, and the difference is greatest for infants. Lower mortality in the urban areas may be due to the greater availability of health facilities and services.

Table 8.2 shows that mortality in Java-Bali is lower than in the other two regions. While infant mortality is lower in the Outer Java-Bali II region than in the Outer Java-Bali I region, mortality for children 1-4 years is higher. It should be kept in mind, however, that the survey did not cover seven

provinces in the Outer Java-Bali II region. Previous data sources indicate that infant mortality rates in the provinces excluded from the NICPS were relatively higher than the national average. As expected, among the provinces in Java, West Java has the highest rates. On the other hand, Yogyakarta, Central Java, Bali, and Jakarta have the lowest infant and child mortality in this region. Results of the 1980 Population Census and 1985 SUPAS demonstrated a similar pattern (CBS, 1984; CBS, 1988).

Infant and child mortality seem to be inversely related to the mother's educational attainment, that is, children of women with less education have higher mortality than children of women with more education. However, the mortality differences between women with no education and those with some primary education are smaller than the differences between women with some primary and those who completed primary, or between women who completed primary and those who finished secondary school or higher. Attending some primary school seems to have little effect on childhood mortality compared to completing primary or secondary school.

Table 8.2 Infant and childhood mortality by socioeconomic characteristics of mother, 1977-1987, NICPS, 1987

Characterístic	Infant mortality rate (1q0)	Childhood mortality rate (4q1)	
Residence	F0.0	20 (	77.0
Urban Rurai	50.9 84.1	28.4 43.2	77.9 123.6
Region	<del></del>		
Java-Bali	70.3	36.9	104.5
Outer Java-Bali I	83.7	42.0	122.2
Outer Java-Bali II	75.5	47.1	119.1
Province			
Jakarta	52.9	26.9	78.4
West Java	94.7	51.3	141.1
Central Java	47.9	35.4	81.6
Yogyakarta	37.6	19.1	56.0
East Java	71.4	27.6	97.0
Bali ————————————————————————————————————	65.6	16.3	80.8
Mother's education			
None	98.8	48.4	142.4
Some Primary	82.5	48.5	127.0
Primary completed	60.1	26.2	84.8
Secondary or more	33.9	9.2	42.8
Total	75.2	39.1	111.4

Note: Includes calendar year 1987 up to the month preceding the date of interview.

Table 8.3 presents the differentials in infant and child mortality by sex of the child, mother's age at birth, birth order, and birth interval. The first panel shows an expected pattern, higher infant mortality for males than for females. The sex differential is more than 20 percent for infants and about 10 percent for children under 5 years old. This female advantage is reversed after infancy when female mortality at age 1-4 is slightly higher than for males.

Regarding mortality by mother's age at birth, the under five mortality is high for births to women under 20, relatively low for mothers 20 to 39, and increases for mothers 40 years and over. The same basic pattern holds for infant mortality, but childhood mortality increases consistently with age of mother. This could be due to the fact that survival of infants is more likely to be influenced by biological factors affecting young mothers, whereas children 1-4 might be more influenced by the socioeconomic factors such as

education, which tends to be higher for younger women. In any case, these data support the family planning program's encouragement for women to have children when they are in their 20s, because of health reasons.

The pattern of infant mortality differentials according to birth order is similar to that by age of mother. First babies and those whose birth order is 7 or above have higher infant mortality than those whose birth order is 2 to 6. This pattern changes for children under 5 and 1 to 4 years of age, whose mortality seems to increase with birth order.

Large differentials are present for mortality by birth interval. A longer birth interval clearly increases a child's chances of survival. The last panel in Table 8.3 demonstrates that a child born less than 2 years after his sibling has a 76 percent greater chance of dying in infancy than a child born 2 to 3 years after a previous child, and more than twice the risk of dying than a child born after an interval of 4 or more years. The advantage of a longer birth interval persists beyond infancy, since even at ages 1-4, children who are born less than 2 years after a sibling have approximately half the chance of surviving compared to those born after an interval of 4 or more years. It should be noted that at least some of these differences in mortality by length of birth interval could be due to differences in length of birth interval by socioeconomic status. Figure 8.2 depicts some of the more outstanding differentials in infant mortality.

Table 8.3 Infant and childhood mortality by demographic characteristics, 1977-1987 NICPS, 1987

Characteristic	Infant mortality rate (1q0)	Childhood mortality rate (4q1)	Under 5 mortality rate (5q0)
Sex of child Male Female	84.2 65.6	36.6 41.7	117.7 104.6
Mother's age at birth Less than 20 20-29 30-39 40-49	99.2 68.1 74.2 71.1	36.8 38.5 41.6 53.1	132.3 104.0 112.8 120.4
Birth order 1 2-3 4-6 7 or over	78.1 70.3 70.5 94.0	25.9 40.3 39.2 60.8	102.0 107.7 106.9 149.0
Interval since previous birth Less than 2 years 2-3 years 4 years or more	109.1 62.1 50.6	50.6 45.7 25.6	154.2 105.0 74.9

Note: Includes calendar year 1987 up to the month preceding the date of interview.

# 8.4 Proportion Dead Among Children Ever Born

Table 8.4 shows the mean number of children ever born, children surviving, and the proportion of children who have died among all live births classified by the women's age. As expected, the proportion of children who died increases with the age of women. Overall, 14 percent of all children did not survive.

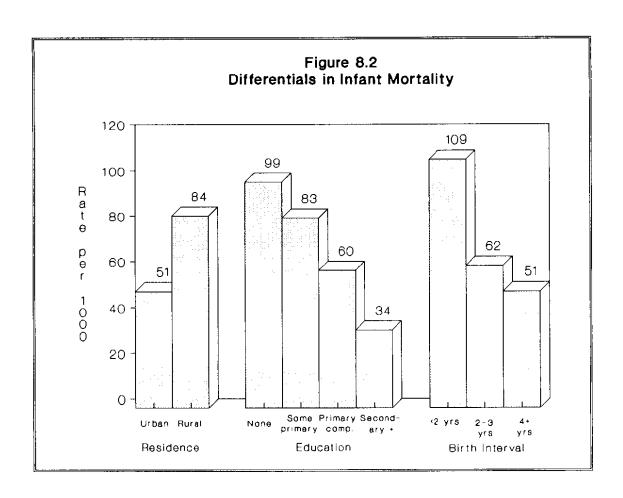


Table 8.4 Mean number of children ever born, surviving, and dead, and proportion of children dead by age of mother, NICPS, 1987

	Mean	number of chil		Number		
Age of woman	Ever born	Surviving	Dead	Propor- tion dead	of women	
15-19	0.46	0.42	0.04	0.08	3342	
20-24	1,40	1.28	0.12	0.09	3066	
25-29	2.44	2.17	0.27	0.11	2818	
30-34	3.51	3.07	0.44	0.13	2200	
35-39	4.40	3.77	0.63	0.14	1742	
40-44	5.25	4.36	0.88	0.17	1445	
45-49	5.69	4.62	1.07	0.19	1523	
Total	2.75	2.36	0.39	0.14	16136	

# 8.5 Assistance at Birth and Place of Delivery

Table 8.5 presents data on the type of assistance for births that occurred in the five years before the survey. In Indonesia, 61 percent of births are attended by traditional birth attendants, 32 percent by trained nurses or midwives, and only 4 percent by doctors. These figures do not vary widely by the respondent's age.

Table 8.5 Percent distribution of births in the last five years by type of assistance at delivery, according to background characteristics of mother, NICPS, 1987

Background characteristic	None	Doctor	Trained nurse/ midwife	birth	Relative	Other	Total	Number of births*
Age							-	
Under 20	0.1	2.9	24.1	71.2	1.2	0.5	100.0	340
20-29	0.1	3.5	33.2	60.7	1.5	1.0	100.0	4778
30 or over	0.3	4.8	31.8	60.1	2.0	1.0	100.0	3058
Residence								
Urban	0.0	10.3	58.7	30.1	0.5	0.4	100.0	2217
Rural	0.2	1.6	22.5	72.4	2.1	1.1	100.0	5959
Region								
Java-Bali	0.1	4.6	25.9	67.1	1.4	0.9	100.0	4855
Outer Java-Bali I	0.2	3.2	43.7	51.2	1.1	0.6	100.0	2868
Outer Java-Bali II	0.3	2.0	29.6	56.3	8.0	3.8	100.0	453
Province								
Jakarta	0.0	15.2	64.2	19.4	0.3	0.9	100.0	406
West Java	0.0	2.9	18.0	78.3	0.5	0.3	100.0	1618
Central Java	0.1	3.4	21.5	73.1	1.2	0.7	100.0	1345
Yogyakarta	0.3	6.5	29.8	62.6	0.6	0.2	100.0	116
East Java	0.4	4.5	25.4	67.2	1.1	1.4	100.0	1252
Bali	0.4	4.7	52.7	14.2	25.7	2.3	100.0	119
Mother's education								
None	0.1	0.9	10.9	84.0	2.9	1.2	100.0	1483
Some primary	0.3	1.4	26.9	68.4	2.0	1.0	100.0	3509
Primary completed	0.2	3.3	38.6	56.1	0.9	0.9	100.0	2052
Secondary or more	0.0	17.2	65.7	16.3	0.5	0.3	100.0	1131
Total	0.2	4.0	32.3	60.9	1.7	0.9	100.0	8176

<sup>\*</sup> Includes births 1-59 months prior to the survey.

It is interesting to note that about 70 percent of births in urban areas are assisted by medical personnel (doctor, nurse or midwife); the other 30 percent are assisted by traditional birth attendants. The opposite is true for rural areas, where only about 25 percent of births are attended by medical personnel and over 70 percent by traditional birth attendants. In the predominantly urban province of Jakarta, 80 percent of all births are assisted by medical staff. In Bali, 1 in 4 births is assisted by a relative; however, this high level may be due to confusion of two response categories, namely traditional birth attendant and relative. In this province, medical staff play an important role because almost 60 percent of all births are assisted by these persons.

The fifth panel in Table 8.5 shows that better educated women tend to seek assistance from medical personnel, while uneducated women are more likely to be assisted by traditional birth attendants or relatives.

Table 8.6 presents data about the place of delivery for births occurring in the five years before the survey. Almost three out of every four births (72 percent) in Indonesia take place at home and only one in five occurs at a hospital or health center. Similar levels of home deliveries have been reported elsewhere (Rahardjo, et al., 1988). Although the level seems high, most of these deliveries are assisted by midwives or traditional birth attendants. The only major differences by background characteristics are that urban women, women in Jakarta and Bali, and better educated women are much more likely to deliver their babies in hospitals and health centers.

Table 8.6 Percent distribution of births in the last five years by place of delivery, according to background characteristics, NICPS, 1987

		Type of	assistand	e at bir	th:			
Background characteristic	General hospital	Mater- nity hospital	Health center	Home	Someone else's house	Other	Total	Number of births*
Age								
Under 20	3.8	8.3	2.6	71.6	13.1	0.6	100.0	340
20-29	7.8	10.7	1.2	71.2	8.4	0.7	100.0	4778
30 or over	8.0	10.6	1.4	73.5	5.6	0.9	100.0	3058
Residence								
Urban	18.6	27.7	1.8	45.3	6.2	0.4	100.0	2217
Rural	3.7	4.2	1.2	82.0	8.0	0.9	100.0	5959
Region								
Java-Bali	8.2	10.3	1.4	73.4	6.0	0.7	100.0	4855
Outer Java-Bali I	7.3	11.6	1.2	69.1	10.3	0.5	100.0	2868
Outer Java-Bali II	5.9	7.1	1.9	76.6	7.1	1.4	100.0	453
Province		<del> </del>						
Jakarta	22.7	44.5	4.2	24.7	3.0	0.9	100.0	405
West Java	4.8	7.3	0.7	78.0	9.0	0.2	100.0	1618
Central Java	6.4	7.1	0.8	84.4	0.9	0.4	100.0	1345
Yogyakarta	8.2	16.6	2.1	68.0	5.0	0.1	100.0	116
East Java	8.6	5.3	1.5	74.5	8.4	1.7	100.0	1252
Bali	19.6	17.7	6.6	46.3	7.8	2.0	100.0	119
Mother's education								
None	2.3	3.5	0.6	89.2	3.6	0.8	100.0	1483
Some primary	3.7	6.3	1.0	79.9	8.2	0.9	100.0	3509
Primary completed	9.1	12.2	1.6	67.4	9.0	0.7	100.0	2053
Secondary or more	24.7	30.4	2.8	33.6	8.1	0.4	100.0	1131
Total	7.7	10.6	1.4	72.1	7.5	0.7	100.0	8176

<sup>\*</sup> Includes births 1-59 months prior to the survey.

### 8.6 Source of Water and Toilet Facilities

Tables 8.7 and 8.8 display the distribution of women by the sanitary condition of their household environment. Table 8.7 shows the distribution of women by source of drinking water and water for bathing, washing, cooking, and other uses, while Table 8.8 relates to the toilet facility available to the household. The types of water sources and toilet facilities are ordered on the basis of degree of cleanliness, such that a category lower down on the list indicates presumably less sanitary conditions.

Table 8.7 shows that 56 percent of all respondents get their drinking water from wells, 16 percent from springs, 10 percent use piped water, and about the same number use pumps. These figures vary by urban and rural residence. Urban women are much more likely than rural women to use piped water and water from pumps, whereas, rural women depend almost exclusively on well and spring water. Other sources of water are not widely used.

The same table demonstrates that the source of drinking water differs somewhat from that of water for other uses. As with drinking water, about half of all respondents get their water for washing and cooking from wells, 10 percent use pumps, and 15 percent use spring water. However, river water is more commonly used for non-drinking purposes than for drinking purposes, and piped water is less commonly used. Comparing figures for urban and rural areas, one notices that the use of well does not differ very much (48 percent in urban and 52 percent in rural). However, generally, urban respondents tend to use

more sanitary water sources such as pipes (19 percent) and pumps (22 percent) than their rural counterparts, who use spring water (18 percent) and river water (21 percent).

Table 8.8 shows that of all women in the NICPS sample, 45 percent do not have toilet facilities. Seventeen percent have a private toilet with a septic tank, 26 percent have a private facility without a septic tank, and 12 percent a shared or public facility. There are sharp differences in toilet facilities between women in urban and rural areas. In urban areas, only 19 percent of women do not have toilet facilities, 42 percent use private facilities with septic tanks, 24 percent have private toilets without septic tanks, and 15 percent make use of shared or public facilities. Women in rural areas are much less likely to have sanitary amenities; more half of these women do not have toilets, only 7 percent have private facilities with septic tanks, 27 percent have private facilities without septic tanks, and 10 percent use shared facilities.

Table 8.7 Percent distribution of ever-married women by sources of drinking water and of water for other household uses (washing, cooking, etc.) according to urban-rural residence, NICPS, 1987

_	Dri	nking wat	er	Water for washing, cooking			
Source of water	Urban	Rural	Total	Urban	Rural	Total	
Pipe	31.3	2.5	10.4	18.7	1.1	5.9	
Pump	19.2	6.7	10.1	21.9	5.5	10.0	
⊌elÌ	42.7	61.2	56.1	48.4	52.2	51.2	
Spring	4.8	20.0	15.8	4.6	18.5	14.7	
River	1.3	7.5	5.8	5.5	20.7	16.6	
Rainwater	0.6	1.7	1.5	0.0	0.2	0.1	
Other	0.1	0.4	0.3	0.9	1.8	1.5	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
No, of women	3272	8612	11884	3272	8612	11884	

Table 8.8 Percent distribution of ever-married women by type of toilet facility in the household, according to urban-rural residence, NICPS, 1987

Type of toilet	Urban	Rural	Total
Private, with septic tank	41.8	7.2	16.7
Private, without septic tank	23.8	27.4	26.4
Shared/public	15.3	10.1	11.5
Other/None	19.1	55.3	45.4
Total	100.0	100.0	100.0
Number of women	3272	8612	11884

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# APPENDIX A SURVEY DESIGN

# APPENDIX A SURVEY DESIGN

# A.1 Geographic Coverage

It has been mentioned that the first phase of the National Family Planning Program was implemented in the Java-Bali region. This design was based on the fact that in areas outside Java-Bali there are few social programs, a lack of transportation and communication facilities, difficult terrain, and a widely dispersed population. Thus, the strategy for the program in each region was developed in accordance with the situation. Based on the same consideration, the 1987 NICPS sample was designed to reflect the regional classification by the family planning program so as to provide estimates for each major region: Java-Bali, Outer Islands I, and Outer Islands II. For this reason, not all provinces were included in the survey. Several provinces with small populations in Outer Java-Bali, namely Jambi, East Nusa Tenggara, East Timor, Central Kalimantan, East Kalimantan, Maluku and Irian Jaya, and some regencies which lack transportation facilities such as Kepulauan Talaud in Sulawesi Utara, were not included in the 1987 NICPS. However, the excluded areas cover less than 7 percent of the total population of Indonesia.

## A.2 Sample Design

The 1987 NICPS sample was drawn from the annual National Socioeconomic Survey (popularly called SUSENAS) which was conducted in January and February 1987. Each year the SUSENAS consists of one set of core questions and several modules which are rotated every three years. The 1987 SUSENAS main modules covered household income, expenditure, and consumption. In addition, in collaboration with the Ministry of Health, information pertaining to children under 5 years of age was collected, including food supplement patterns, and measurement of height, weight, and arm circumference. In this module, information on prenatal care, type of birth attendant, and immunization was also asked.

This national survey covered over 60,000 households which were scattered in almost all of the districts. The data were collected by the "Mantri Statistik", a CBS officer in charge of data collection at the sub-district level. All households covered in the selected census blocks were listed on the SSN 87-LI form. This form was then used in selecting samples for each of the modules included in the SUSENAS. This particular form was also used to select the sample households in the 1987 NICPS.

Sample selection in the 1987 SUSENAS utilized a multistage sampling procedure. The first stage consisted of selecting a number of census blocks with probability proportional to the number of households in the block. Census blocks are statistical areas formed before the 1980 Population Census and contain approximately 100 households. At the second stage, households were selected systematically from each sampled census block.

Selection of the 1987 NICPS sample was also done in two stages. The first stage was to select census blocks from the those selected in the 1987 SUSENAS. At the second stage a number of households was selected systematically from the selected census block. The number of selected areas in each province is presented in Table A.1.

## A.3 Survey Instruments

The 1987 NICPS utilized two questionnaires and several forms for data collection and for supervision of the field activity. There were two manuals, one for the interviewers and one for the supervisors. The household and individual questionnaires are reproduced in Appendix D.

Table A.1 Sample coverage by province, NICPS, 1987

Region/Province	No. of census blocks	Number of teams	No. of house- holds	No. of respond- ents
Java-Bali Jakarta West Java Central Java	53 53 53	3 3 3 2 2	1848 1985 1642	1729 1654 1370
Yogyakarta East Java Bali	37 53 37	2 3 2	1560 1747 1303	1059 1581 1042
Outer Java-Bali I Aceh North Sumatra West Sumatra South Sumatra Lampung West Kalimantan South Kalimantan North Sulawesi South Sulawesi West Nusa Tenggara	4 15 6 9 8 5 4 5	1 1 1 1 1 1 1	158 589 200 328 345 190 172 170 421 223	136 491 155 317 304 173 144 139 359
Outer Java-Bali II Riau Bengkulu Central Sulawesi Sulawesi Tenggara	14 5 11 9	1 1 1	430 153 406 271	371 128 354 217
Total	400	30	14141	11884

The household questionnaire was used to record all members of the selected households who usually live in the household. The questionnaire was utilized to identify the eligible respondents in the household, and to provide the numerator for the computation of demographic measurements such as fertility and contraceptive use rates.

The individual questionnaire was used for all ever-married women aged 15-49, and consisted of the following eight sections:

### Section 1 Respondent's Background

This part collected information related to the respondent and the household, such as current and past mobility, age, education, literacy, religion, and media exposure. Information related to the household includes source of water for drinking, for bathing and washing, type of toilet, ownership of durable goods, and type of floor.

### Section 2 Reproduction

This part gathered information on all children ever born, sex of the child, month and year of birth, survival status of the child, age when the child died, and whether the child lived with the respondent. Using the information collected in this section, one can compute measures of fertility and mortality, especially infant and child mortality rates. With the birth history data collected in this section, it is possible to calculate trends in fertility over time. This section also included a question about whether the respondent was pregnant at the time of interview, and her knowledge regarding women's fertile period in the monthly menstrual cycle.

### Section 3 Knowledge and Practice of Family Planning

This section is one of the most important parts of the 1987 NICPS survey. Here the respondent was asked whether she had ever heard of or used any of the family planning methods listed. If the respondent had used a contraceptive method, she was asked detailed questions about the method. For women who gave birth to a child since January 1982, questions on family planning methods used in the intervals between births were also asked. The section also included questions on source of methods, quality of use, reasons for nonuse, and intentions for future use. These data are expected to answer questions on the effectiveness of family planning use. Finally, the section also included questions about whether the respondent had been visited by a family planning field worker, which community-level people she felt were most appropriate to give family planning information, and whether she had ever heard of the condom, DuaLima, the brand being promoted by a social marketing program.

### Section 4 Breastfeeding

The objective of this part was to collect information on maternal and child health, primarily that concerning place of birth, type of assistance at birth, breastfeeding practices, and supplementary food. Information was collected for children born since January 1982.

## Section 5 Marriage

This section gathered information regarding the respondent's age at first marriage, number of times married, and whether the respondent and her husband ever lived with any of their parents. Several questions in this section were related to the frequency of sexual intercourse to determine the respondent's risk of pregnancy. Not all of the data collected in this section are presented in this report; some require more extensive analysis than is feasible at this stage.

#### Section 6 Fertility Preferences

Intentions about having another child, preferred birth interval, and ideal number of children were covered in this section.

#### Section 7 Husband's Background and Respondent's Work

Education, literacy and occupation of the respondent's husband made up this section of the questionnaire. It also collected information on the respondent's work pattern before and after marriage, and whether she was working at the time of interview.

#### Section 8 Interview Particulars

This section was used to record the language used in the interview and information about whether the interviewer was assisted by an interpreter. The individual questionnaire also included information regarding the duration of interview and presence of other persons at particular points during the interview.

In addition to the questionnaires, two manuals were developed. The manual for interviewers contained explanations of how to conduct an interview, how to carry out the field activity, and how to fill out the questionnaires. Since information regarding age was vital in this survey, a table to convert months from Javanese, Sundanese and Islamic calendar systems to the Gregorian calendar was attached to the 1987 NICPS manual for the interviewers.

The manual for supervisors described their responsibilities, such as visiting the survey location, identifying the sampled households, allocating the households to the interviewers, and editing the questionnaires in the field. This manual also included a description of some potential problems in data collection in the field, as well as their solution.

Fieldwork control forms for the NICPS consisted of a Supervisor's Control Sheet and an Interviewers' Control Sheet. Both forms were filled in daily to monitor the allocation of work and the results of attempted interviews. One sheet was filled for every sample unit (census block). This information is useful in assessing the response rates and in controlling the flow of documents. In addition, the supervisor filled an Interviewer Progress Sheet for every interviewer in his team, in order to monitor the number of interviews completed by his team members.

Interviewers in the 1987 NICPS carried two sheets showing pictures of packages of the brands of pills and condoms which are widely used in Indonesia. These sheets were provided free of charge by the IKB-Somark project. If the respondent stated that she used the pill or her husband used the condom but could not show the package, she was asked to identify the brand of the pill or condom being used from this picture.

# A.4 Survey Organization

The responsibility for implementing the survey rests with the Deputy for Statistical Planning and Analysis, CBS, while the Director of the Social and Population Statistics Bureau was in charge of the daily activities of the survey. An ad hoc technical team was set up in the CBS, consisting of officers whose work was related to survey activities or whose position in the CBS organization was associated with the 1987 NICPS. Some of them took part in the Indonesian Fertility Survey in 1976, which was carried out under the auspices of the World Fertility Survey Program. Several members were trained in demography at either a local or overseas institution. Data processing for the survey was assigned to the staff of the Social and Population Statistics Bureau in CBS, who were specially trained to do the job.

The implementation of the survey was directed by a Steering Committee formed by the Chairman of the NFPCB. This committee consisted of NFPCB staff and representatives from other institutions involved in the area of population and family planning. Representatives of USAID/Jakarta and UNFPA/Jakarta were ex-officio members of the team. Because team members had extensive experience as users or producers of population and family planning data, they played an active role and contributed to the success of the 1987 NICPS.

The representatives of USAID/Jakarta and UNFPA/Jakarta also assisted as consultants, especially in the administration of funds. The Institute for Resource Development, a subsidiary of Westinghouse provided technical assistance in almost all phases of the survey, including preparation/planning, sampling design, questionnaire design, data processing, and analysis of the data.

In each province covered in the survey, the Director of the Provincial Statistical Office (PSO) took responsibility for administrative and technical implementation of the survey in his area. In conducting the field activity, the PSO Director was assisted by the Field Coordinator and the Chiefs of the Regency/Municipality Statistics Offices.

A Field Coordinator was appointed in each province to be responsible for all phases of survey implementation in his area. The Field Coordinator was the Chief of the Social and Population Statistics section in the PSO. To accomplish their tasks, the Field Coordinators attended a special training session. The CBS staff at the sub-district level (Mantri Statistik) and the staff of the Regency/Municipality Statistics Office, who usually acted as enumerators in the SUSENAS, also took part in the 1987 NICPS as guides for the field workers in their respective areas.

Most of the 1987 NICPS interviewers were female staff from the PSO. They averaged 31 years of age and had at least a high school education. Two-thirds of them were single. The supervisors were PSO staff, mainly those who worked in the Social and Population Statistics Section. For logistical and security reasons, it was decided to select male supervisors. Names of the Steering Committee members, the technical team, and the field workers are listed in Appendix C.

## A.5 Pretest

The 1987 NICPS pretest was carried out at the Regency of Jember in East Java, in order to test the questionnaires and manuals, to estimate the time needed for training, to test teaching methods, to observe field activity in order to estimate an appropriate workload for the interviewers, to observe interviews conducted in local languages, and to test the readiness of the region to carry out the survey. Field staff training took place from 15-27 June 1987 and was attended by 10 people. Trainees were grouped into two teams each consisting of 1 supervisor, 1 field editor and 3 interviewers.

The pretest fieldwork was completed in 11 days. In general, the interviewers did not find major difficulties in conducting the interviews. There were no refusals from either households or respondents. Information related to the survey which was provided by the village staff to the public before the pretest helped in obtaining public acceptance. In addition, it was discovered that single women did not have problems asking questions about contraception and sexual practices. This showed that marriage need not be a prerequisite in recruiting the NICPS fieldworkers.

The duration of interviews varied considerably, and was influenced by the respondent's characteristics (number of children born since January 1982, and history of contraceptive used), the interviewer's ability to ask the questions, and the respondent's ability to absorb and understand the questions and to give answers. Individual interviews took between 15-95 minutes or 40 minutes on average. This meant that an interviewer could finish about three households a day, including locating the households, editing the questionnaires, and revisiting when necessary.

Problems encountered in the class and during the field work were discussed during the training and in a briefing held toward the end of the pretest. The briefing was attended by all the field workers, the instructors, CBS and East Java PSO staff, and observers from the NFPCB. The survey instruments were then finalized before being sent to the printer.

## A.6 Main Survey Training

Given the large number of field workers, high transportation costs, and the length of the training, it was decided that the training should be done in stages. The first stage was training for the Field Coordinators which was organized by the CBS. The next stage was for the field workers, and was carried out in five training centers by the Provincial Statistics Offices.

Ten of the twenty Field Coordinators who represented the 20 provinces covered in the survey attended a training course conducted by CBS August 10-16, 1987. This training was aimed at giving them knowledge and expertise in planning and implementing the survey in their provinces. The Field Coordinators assisted CBS instructors during field worker training. The instructors were Toto E. Sastrasuanda and Sri Poedjastocti of the Social and Population Statistics Bureau, and Dr. Sudarti Surbakti of the Bureau of Analysis and Development.

The second stage of the training was carried out in two phases in five training centers. The participants included all Field Coordinators who had not received training, supervisors, and interviewers. Information on each of the training centers is presented in Table A.2.

The training lasted 15 days and followed a standard pattern. It consisted of explanations of the survey procedures, instructions on how to fill the questionnaires, how to conduct interviews, and discussions on issues related to family planning. In this training a greater proportion of time was spent on interviewing techniques and practices. Several methods of practice interviewing were used, such as listening to recorded interviews, observing and listening to an interview conducted by the instructor, and finally carrying out actual interviews. Practice interviewing was introduced in stages, beginning with interviewing other participants

Table A.2 Information on training centers, NICPS, 1987

Training center/ Province	Provinces covered	Instructor	Dates of course	No. of trainees
Bukittinggi/ West Sumatra	DI Aceh, North Sumatra, West Sumatra, Riau, South Sumatra, Bengkulu	Sri Poedjastoeti	August 31- Sept.14, 1987	33
Malang/East Java	East Java, Bali, West Nusa Tenggara, South Kalimantan	Sudarti Surbakti	August 31-Sept. 14, 1987	41
Ujung Pandang/South Sulawesi	North Sulawesi, Central Sulawesi, Southeast Sulawesi, South Sulawesi	Toto E. Sastra- suanda	September 3-17, 1987	22
Salatiga/Central Java	Central Java, Di Yogyakarta	Sri Poedjastoeti	Sept. 21-Oct.6, 1987	34
Bogor/DKI Jakarta	DKI Jakarta, West Java, Lampung, West Kalimantan	Toto E. Sastra- suanda	Sept. 21-Oct.6, 1987	46

in the class, then respondents who were invited to the class, and then respondents in their homes. When participants came from areas in which several languages were spoken, practice interviews were carried out in those languages. During the field practice, interpreters were sometimes needed.

In all training centers some sessions were used to discuss family planning and related issues. This is vital in providing field workers with knowledge about methods of contraception, especially because many of them were single and not aware of the various contraceptive methods included in the survey questionnaires.

Several tests were given during the training on which the performance of the trainees was evaluated. The trainees' skill in conducting interviews was also observed. The best participants were appointed as Field Editors.

### A.7 Data Collection

The 1987 NICPS field work was not carried out simultaneously throughout Indonesia. Provinces where field worker training was conducted first began data collection earlier than provinces where training took place later. Field work was initiated in mid-September 1987 and ended in the third week of December 1987.

On the average, interviews with eligible respondents were completed in 40 minutes. An interviewer could finish about 3 or 4 households and individual interviews a day, including time used for locating the sample household, editing the questionnaires and revisits.

Data collection was carried out by teams which moved from one sample point to another within a province. The number of teams in each province varied. Large provinces such as West Java, Central Java and East Java had 3 teams, whereas other provinces usually had one team. The size of the teams also varied by province. In Java and Bali, each team consisted of 3 or 4 interviewers, one field editor, and one supervisor. In other areas the composition of the team was similar except the number of interviewers was limited to two.

In provinces that had more than one team, there were several ways of dividing the workload between the teams. The first was by dividing the province into regions. For example, in East Java one team was responsible for areas where the Madurese language is used, while other teams covered the rest of the province where Indonesian and Javanese are spoken. Another method was applied in Jakarta, where

the teams covered the same areas together. This way interviews were completed by municipality. This method was feasible because in all regions of Jakarta, everyday conversation is conducted in the Indonesian language. In Bali, each team was responsible for half of all census blocks in the sample; but in areas which have difficult terrain, the two teams were combined to facilitate enumeration and to maintain equal workload between the teams.

In provinces such as North Sumatra and South Sulawesi, where more than one language is spoken and there was only one team, the team members were selected on the basis of fluency in the local languages. Although there are nuances in the dialects, team members were able to carry out their duties successfully. In some instances assistance from an interpreter was needed.

To obtain full cooperation from the public in the sample areas, generally the supervisor made contacts with the local authorities through the respective Statistics Office prior to the fieldwork. At the administrative level below sub-district, the neighborhood associations were visited to inform people of the coming visit of the survey team. This approach proved effective, as shown by the low level of refusals. The response rates presented in Tables A.3 and A.4 show that 98.5 percent of respondents were successfully interviewed. Although no major problems were encountered during the fieldwork, there were some difficulties.

The most difficult problem in the interview was obtaining information related to time, such as month and year of birth or marriage, time when the respondent began or stopped using contraception,

Table A.3 Results of household interviews by sample domain, NICPS, 1987

		Java-Bal i							
Result of interview	Jakarta	West Java	Central Java	Yogya- karta	East Java	Bali	- Java Bali I	Java Bali II	Total
Completed	91.8	96.1	96.9	96.4	96.8	97.8	96.5	94.9	95.9
No competent respndnt.	0.2	0.2	0.5	0.3	0.6	0.1	0.2	1.1	0.4
Refused	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dwelling destroyed	0.9	0.9	0.4	0.4	0.2	0.3	0.6	8.0	0.6
Dwelling vacant	7.0	2.2	2.1	2.7	1.8	1.6	2.4	2.9	2.9
Dwelling not found	0.1	0.0	0.1	0.1	0.3	0.0	0.1	0.2	0.1
Other	0.1	0.6	0.0	0.2	0.3	0.3	0.2	0.0	0.2
Total percent Number of cases	100.0 2014	10D.D 2065	100.0 1695	100.0 1618	100.0 1804	100.0 1333	100.0 2897	100.0 1329	100.0 14755

Table A.4 Results of individual interviews by sample domain, NICPS, 1987

		Java-Bali						Outer Java	
Result of interview	Jakarta	West Java	Central Java	Yogya- karta	East Java	Bali	Java Bali I	Bali 11	Total
Completed	99.5	97.8	98.3	99.2	98.4	99.7	98.6	96.4	98.5
Not at home	0.4	1.8	0.7	0.7	0.6	0.3	1.2	2.8	1.0
Postponed	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Refused	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.5	0.1
Partly completed	0.0	0.1	0.3	0.1	0.3	0.0	0.1	0.2	0.1
Other	0.1	0.4	0.6	0.1	0.3	0.0	0.1	0.1	0.2
Total percent Number of cases	100.0 1737	100.0 1692	100.0 1394	100.0 1068	100.0 1606	100.0 1045	100.0 2413	100.0 1110	100.0 12065

and duration of events. To minimize error in this area, a table for converting months in the Javanese, Sundanese, and Muslim calendars to the Gregorian calendar was appended to the manual for interviewers. These conversion tables were frequently used in the field, which shows that a large proportion of the Indonesian population uses non-Gregorian calendars in determining time. This is more obvious for month, while for year the Gregorian calendar is adopted widely.

In the first stage, editing was done by the interviewers. After the questionnaires were submitted to the supervisor, the field editors checked their completeness, accuracy and consistency. Next, the supervisors carried out the same procedure. Apart from checks included in the supervisors' manual, additional editing such as checking the worksheet for dates of birth of the children and timing of contraception use, needed to be performed by the field editor and supervisor.

Close supervision of field work was provided by the Field Coordinator. In provinces where the number of sample points was small the Field Coordinator supervised the team at all times. In Java, the Field Coordinators organized their time such that each team received equal supervision.

In addition to supervision by survey staff, members of the Technical Team in the central office also participated in the fieldwork observation. The objective of their visits was to monitor the progress of the fieldwork, to help solve problems, and to enhance the morale of the field workers.

## A.8 Data Processing

Based on the number of questionnaires received from the field, survey implementation did not differ significantly from survey design. Of 14,861 households expected, 14,755 were actually found, and 14,141 Household Schedules were completed. In the planning stage, 12,000 eligible respondents were targetted in the sample. During the field visits, 12,073 eligible women were found, of whom 11,884 were successfully interviewed.

Documents received from the field were manually edited to ensure completeness in terms of quantity and content, and to check responses. The number of documents received were checked against the accompanying Supervisor's and Interviewers' Assignment Sheets. At this stage "open-ended" questions were coded. The data were subsequently entered onto microcomputers using a package program, the Integrated System for Survey Analysis (ISSA), specially developed to process DHS data. The processing used four 640K IBM-compatible computers and two printers.

The first step in data processing involved transferring the data recorded in the questionnaires to diskettes. Next was verification of the recorded data on a random basis to check for errors during data entry. Before tabulation, the data were edited for consistency, using a series of specially designed rules to minimize existing errors. Tabulations were run at IRD/Westinghouse and sent to the designated analysts in Indonesia, who subsequently spent a month at DHS headquarters in Columbia, Maryland drafting this report.

# APPENDIX B ESTIMATES OF SAMPLING ERROR

### APPENDIX B. ESTIMATES OF SAMPLING ERROR

The results from sample surveys are affected by two types of errors: (1) nonsampling error and (2) sampling error. Nonsampling error is due to mistakes made in carrying out field activities, such as failure to locate and interview the correct household, errors in the way questions are asked, misunderstanding of the questions on the part of either the interviewer or the respondent, data entry errors, etc. Although efforts were made during the design and implementation of the NICPS to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate analytically.

The sample of women selected in the NICPS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each one would have yielded results that differed somewhat from the actual sample selected. The sampling error is a measure of the variability between all possible samples; although it is not known exactly, it can be estimated from the survey results. Sampling error is usually measured in terms of the "standard error" of 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 one can be reasonably assured that, apart from non-sampling errors, the true value of the variable for the whole population falls. For example, for any given statistic calculated from a sample survey, the value of that same statistic as measured in 95 percent of all possible samples with the same design (and expected size) will fall within a range of plus or minus two times the standard error of that statistic.

If the sample of women had been selected as a simple random sample, it would have been possible to use strightforward formulas for calculating sampling errors. However, the NICPS sample design depended on stratification, stages, and clusters; consequently, it was necessary to utilize more complex formulas. The computer package CLUSTERS was used to assist in computing the sampling errors with the proper statistical methodology.

The CLUSTERS program treats any percentage or average as a ratio estimate, r=y/x, where both x and y are considered to be random variables. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

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

in which,  $z_{hi} = y_{hi} - r x_{hi}$ , and  $z_{h} = y_{h} - r x_{h}$ ,

where h represents the stratum and varies from 1 to H.

m<sub>h</sub> is the total number of EAs selected in the h-th stratum,

y<sub>bi</sub> is the sum of the values of variable y in cluster i in the h-th stratum,

 $x_{hi}$  is the sum of the number of cases (women) in cluster i in the h-th stratum, and

f is the overall sampling fraction, which is so small that the CLUSTERS program ignores it.

In addition to the standard errors, CLUSTERS computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates

that the sample design is as efficient as a simple random sample; 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.

Sampling errors are presented in Tables B.2.1-B.2.9 for 21 variables considered to be of major interest. Results are presented for the whole country, for women in three broad age groups, for urban and rural areas, and for Java-Bali, Outer Java-Bali I and Outer Java-Bali II. For each variable, the type of statistic (mean, proportion) and the base population are given in Table B.1. For each variable, Tables B.2.1-B.2.9 present the value of the statistic, its standard error, the number of unweighted and weighted cases, the design effect, the relative standard error, and the 95 percent confidence limits.

The confidence interval has the following interpretation. For the mean number of children ever born (CEB), the overall average from the sample is 3.399 and its standard error is 0.040. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $3.399 + or - (2 \times 0.040)$ , which means that there is a high probability (95 percent) that the true average number of children ever born falls within the interval of 3.318 to 3.479.

The relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The magnitude of the error increases as estimates for subpopulations such as particular age groups, and especially geographical areas, are considered. For the variable CEB, for example, the relative standard error (as a percentage of the estimated mean) for the whole country, urban areas, and Outer Islands I is, respectively, 1.2 percent, 1.6 percent, and 2.3 percent. This means that the survey can provide estimates of CEB only with a margin of uncertainty (at the 95 percent confidence level) of +2.4 percent, 3.2 percent, and 4.6 percent respectively for these three domains.

Table B.1 List of selected variables with sampling errors, NICPS, 1987

Variable	Туре	Description	Base Population
URBAN	Proportion	Urban	Ever-married women 15-49
EDUC	Proportion	Secondary or more	Ever-married women 15-49
KNOW	Proportion	Knowing any method	Ever-married women 15-49
KNOWMOD	Proportion	Knowing any modern method	Currently married women 15-49
EVERUSE	Proportion	Ever used any method	Ever-married women 15-49
CYCLE	Proportion	Knows fertile period in ovulatory cycle	Ever-married women 15-49
CURRUSE	Proportion	Currently using any method	Currently married women 15-49
USEPIL	Proportion	Using pill	Currently married women 15-49
USEIUD	Proportion	Using IUD	Currently married women 15-49
USEFST	Proportion	Using female sterilization	Currently married women 15-49
USECON	Proportion	Using condom	Currently married women 15-49
USEPER	Proportion	Using periodic abstinence	Currently married women 15-49
GOVSOURC	Proportion	Using public source	Current users
CEB	Mean	Children ever born	Ever-married women 15-49
CEBSURV	Mean	Children surviving	Ever-married women 15-49
NOMORE	Proportion	Wants no more kids	Currently married women 15-49
DELAY	Proportion	Wants to delay next birth for 2 or more years	Currently married women 15-49
IDEAL	Mean	Ideal number of children	Ever-married women 15-49
BREASTF	Mean	Months of breastfeeding	Births in last 3 years
AMENOR	Mean	Months of amenorrhea	Births in last 3 years
ABSTAIN	Mean	Months of postpartum abstinence	Births in last 3 years
ATTENT	Proportion	Attended by doctor or nurse/midwife	Births in last five years

Table B.2.1 Sampling errors for the entire sample, NICPS, 1987

		Stan-	Unwei-	Weight- ed	<b>D</b> :	Rela-	Confiden	ce limits
Variable	Value	dard error	ghted number	number	Design effect	tive error	R-2SE	R+2SE
URBAN	. 275	.012	11884	11884	2.924	.044	.251	.299
EDUC	.131	.008	11884	11884	2.517	.059	.115	.147
KNOW	.937	.007	11884	11884	2.983	.007	.923	.950
KNOWMOD	.942	.007	10919	10907	3.030	.007	.928	.955
EVERUSE	.620	.010	11884	11884	2.317	.017	.599	.641
CYCLE	.180	.008	11884	11884	2.294	.045	.164	. 196
CURRUSE	.477	.010	10919	10907	2.176	.022	.457	.498
USEPIL	.161	.008	10919	10907	2.289	.050	. 145	.177
USEIUD	.132	.008	10919	10907	2.368	.058	.117	148
USEFST	.031	.003	10919	10907	1.934	.103	.025	.038
USECON	.016	.002	10919	10907	1.620	.122	.012	.020
USEPER	.012	.001	10919	10907	1.269	.112	.009	.014
GOVSOURC	.803	.011	5090	4791	2.014	.014	.780	.825
CEB	3.399	.040	11884	11884	1.69B	.012	3.318	3.479
CEBSURV	2.905	.034	11884	11884	1.707	.012	2.837	2.973
NOMORE	513	.008	10919	10907	1.725	.016	.497	.530
DELAY	.268	.006	10919	10907	1.462	.023	.256	.281
IDEAL	3.217	.037	10538	10343	2.654	.012	3.143	3.292
BREASTF	25 150	.434	11884	11884*	1.483	.017	24.282	26.018
AMENOR	10.968	.298	11884	11884*	1.260	.027	10.373	11.563
ABSTAIN	5.322	.257	11884	11884*	1.356	.048	4.809	5.835
ATTENT	.363	.017	11884	11884*	2.641	.048	.329	.398

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.2 Sampling errors for women aged 15-24, NICPS, 1987

		Stan-	Unwei-	Weight- ed	Dani	Rela-	Confiden	ce limits
Variable	Value	dard error	ghted number		Design effect	tive error	R-2SE	R+2SE
URBAN	.231	.015	2479	2633	1.767	.065	.201	.261
EDUC	.143	.012	2479	2633	1.698	.084	.119	. 166
KNOW	.954	.008	2479	2633	1.957	.009	.938	.971
KNOWMOD	.960	.008	2344	2488	1.990	.008	.944	.976
EVERUSE	.556	.017	2479	2633	1.659	.030	.523	.589
CYCLE	.185	.012	2479	2633	1.554	.065	.161	.210
CURRUSE	.420	.015	2344	2488	1.509	.037	.389	.450
USEPIL	.160	.011	2344	2488	1.439	.068	.138	.182
USEIUD	.091	.009	2344	2488	1.572	.103	.072	.110
USEFST	.005	.002	2344	2488	1.092	.314	.002	.008
USECON	.008	.002	2344	2488	1.145	.256	.004	.013
USEPER	.007	.002	2344	2488	1.106	.276	.003	.011
GOVSOURC	.803	.021	940	967	1.585	.026	.762	.844
CEB	1.256	.027	2479	2633	1.316	.021	1.202	1.309
CEBSURV	1.138	.024	2479	2633	1.299	.021	1.090	1.186
NOMORE	.148	.009	2344	2488	1.261	.063	.129	.166
DELAY	.598	.012	2344	2488	1.232	.021	.573	.623
IDEAL	2.796	.041	2362	2472	1.860	.015	2.714	2.878
BREASTF	24.864	.631	2479	2633*	1.352	.025	23.602	26.126
AMENOR	11.081	.477	2479	2633*	1.170	.043	10.127	12.036
ABSTAIN	5.449	.418	2479	2633*	1.266	.077	4.613	6.286
ATTENT	.329	.020	2479	2633*	1.684	.059	.290	.368

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.3 Sampling errors for women aged 25-34, NICPS, 1987

		Stan- dard	Unwei- ghted	Weight- ed	Design	Rela- tive	Confiden	ce limits
Variable	Value	error	number	number	effect	error	R-2SE	R+2SE
URBAN	.288	.014	4748	4630	2.090	.048	.261	.316
EDUC	.151	.010	4748	4630	1.889	.065	.131	.171
KNOW	.957	.008	4748	4630	2.657	.008	.942	.973
KNOWMOD	.958	.008	4489	4386	2.659	.008	.942	.974
EVERUSE	.720	.013	4748	4630	1.962	.018	.694	.745
CYCLE	.191	.009	4748	4630	1.647	-049	.172	.210
CURRUSE	.561	.013	4489	4385	1.744	.023	.535	.587
USEPIL	.205	.011	4489	4385	1.782	.052	.183	.226
USEIUD	.148	.009	4489	4385	1.728	.062	.130	.166
USEFST	.023	.004	4489	4385	1.824	.176	.015	.032
USECON	.019	.003	4489	4385	1.321	.143	.013	.024
USEPER	.013	.002	4489	4385	1.101	.142	.009	.017
GOVSOURC	.799	.013	2437	2276	1.588	.016	.773	825
CEB	2.938	.044	4748	4630	1.744	.015	2.850	3.025
CEBSURV	2.587	.034	4748	4630	1.550	.013	2.518	2.655
NOMORE	.491	.012	4489	4385	1.581	.024	.467	.514
DELAY	.297	.009	4489	4385	1.370	.031	.279	.316
IDEAL	3.169	.043	4388	4215	2.157	.014	3.083	3.255
BREASTF	24.120	.504	4748	4630*	1.229	.021	23.112	25.128
AMENOR	10.839	.395	4748	4630*	1.203	.036	10.049	11.629
ABSTAIN	4.816	.310	4748	4630*	1.225	.064	4.197	5.435
ATTENT	.392	.019	4748	4630*	2.092	.049	. 354	.431

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.4 Sampling errors for women aged 35-49, NICPS, 1987

		Sten-	Unwei- ghted	Weight- ed	Design	Rela- tive	Confiden	ce limits
Variable	Value	error	number	number	effect	error	R-2SE	R+2SE
URBAN	.288	.013	4657	4621	1.932	.045	.262	.314
EDUC	.104	.008	4657	4621	1.845	.079	.088	.121
KNOW	.906	.008	4657	4621	1.899	.009	.889	.922
KNOWMOD	.913	.008	4086	4034	1.813	.009	.897	.929
EVERUSE	.557	.012	4657	4621	1.639	.021	.533	.581
CYCLE	.167	.009	4657	4621	1.737	.057	.148	.186
CURRUSE	.422	.012	4086	4034	1.581	.029	.398	.447
USEPIL	.113	.009	4086	4034	1.717	.075	.096	.130
USEIUD	.141	.010	4086	4034	1.890	.073	.120	.161
USEFST	.056	.006	4086	4034	1.559	.100	-044	.067
USECON	.017	.003	4086	4034	1.451	.171	.011	.023
USEPER	.013	.002	4086	4034	1.034	_141	.009	.017
GOVSOURC	.808	.014	1713	1547	1.460	.017	.781	.836
CEB	5.082	.069	4657	4621	1.685	.014	4.944	5.221
CEBSURV	4.231	.057	4657	4621	1.652	.014	4.116	4.345
NOMORE	.763	.008	4086	4034	1.272	.011	.747	.780
DELAY	.034	.004	4086	4034	1.310	.110	.026	.041
IDEAL	3.558	.052	3788	3656	1.912	.015	3.454	3.663
BREASTF	29.291	1.016	4657	4621*	1.143	.035	27.259	31.322
AMENOR	11.129	.762	4657	4621*	1.207	.069	9.604	12.654
ABSTAIN	6.710	.690	4657	4621*	1.254	. 103	5.330	8.090
ATTENT	.336	.024	4657	4621*	1.574	.070	.289	.384

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.5 Sampling errors for the urban population, NICPS, 1987

		Stan- dard	Unwei-	Weight-	Bi	Rela- tive	Confiden	ce limits
Variable	Value	error	ghted number	number	Design effect	error	R-2SE	R+2SE
URBAN	1.000	.000	4474	3272	.000	.000	1.000	1.000
EDUC	.295	.019	4474	3272	2.801	.065	.257	.333
KNOW	.967	.007	4474	3272	2.517	.007	.954	.980
KNOWNOD	.975	.006	4078	2977	2.266	.006	.964	.986
EVERUSE	.671	.014	4474	3272	1.974	.021	.643	.698
CYCLE	.272	.017	4474	3272	2.513	.062	. 238	.305
CURRUSE	.543	.013	4078	2977	1.654	.024	.517	.569
USEPIL	.126	.009	4078	2977	1.774	.073	.107	.144
USEIUD	.129	.011	4078	2977	2.026	.082	.108	.151
USEFST	.059	.005	4078	2977	1.425	.089	.049	.070
USECON	.042	.006	4078	2977	1.865	.140	.030	.053
USEPER	.028	.003	4078	2977	1.298	.120	.021	.035
GOVSOURC	.715	.019	1951	1432	1.902	.027	.677	.754
CEB	3,357	.050	4474	3272	1.322	.015	3.258	3.457
CEBSURV	2,964	.044	4474	3272	1.350	.015	2.877	3.052
NOMORE	.583	.012	4078	2977	1.597	.021	.558	.607
DELAY	.229	.011	4078	2977	1.712	.049	.206	.251
IDEAL	3.118	.037	3992	2956	1.839	.012	3.044	3.191
BREASTF	21.307	.639	4474	3272*	1.389	.030	20.030	22.584
AMENOR	9.403	.404	4474	3272*	1.083	.043	8.595	10.212
ABSTAIN	4.289	.337	4474	3272*	1.192	.079	3.615	4.964
ATTENT	.690	.027	4474	3272*	2.686	.040	.635	.744

<sup>\*</sup> Based on number of births, obtained through number of ever-married Women.

Table B.2.6 Sampling errors for the rural population, NICPS, 1987

		Stan- dard	Unwei-	Weight- ed	Design	Rela- tive	Confiden	ce limits
Variable	Value	error	ghted number	number	effect	error	R-2SE	R+2SE
URBAN	.000	.000	7410	8612	.000	.000	.000	.000
EDUC	.069	.007	7410	8612	2.251	.096	.056	.082
KNOW	.925	.009	7410	8612	2.790	.009	.908	.942
KNOWMOD	.929	.009	6841	7930	2.834	.009	.912	.947
EVERUSE	.601	.013	7410	8612	2.241	.021	.575	.626
CYCLE	.146	.009	7410	8612	2.261	.064	.127	.164
CURRUSE	.453	.013	6841	7 <del>9</del> 30	2.138	.028	.427	.478
USEPIL	.174	.011	6841	7930	2.326	.061	.152	.195
USEIUD	.133	.010	6841	7 <b>9</b> 30	2.379	.073	.114	.153
USEFST	.021	.004	6841	7 <del>9</del> 30	2.443	.204	.012	.029
USECON	.006	.001	6841	7930	.000	.207	.004	.009
USEPER	.006	.001	6841	7930	.000	.205	.003	.008
GOVSOURC	.840	.013	3139	3358	2.041	.016	.813	.867
CEB	3.415	.054	7410	8612	1.772	.016	3.307	3.522
CEBSURV	2.882	.046	7410	8612	1.821	.016	2.791	2.974
NOMORE	.487	.010	6841	7930	1.653	.021	.467	.507
DELAY	.283	.007	6841	7930	1.351	.026	. 268	.298
IDEAL	3.257	.052	6546	7387	2.808	.016	3.153	3.362
BREASTF	26.577	.560	7410	8612*	1.498	.021	25,457	27.697
AMENOR	11.550	.375	7410	8612*	1.244	.032	10.800	12.300
ABSTAIN	5.706	.332	7410	8612*	1.347	.058	5.042	6.369
ATTENT	.242	.020	7410	8612*	2.814	.085	.201	.283

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.7 Sampling errors for Java-Bali, NICPS, 1987

		Stan-	Unwei-	Weight- ed	<b>.</b>	Rela-	Confiden	ce limits
Variable	Value	dard error	ghted number	number	Design effect	tive error	R-2SE	R+2SE
URBAN	.309	.010	8435	7962	2.053	.033	.288	.329
EDUC	.131	.009	8435	7962	2.550	.072	.112	.149
KNOW	.946	.006	8435	7962	2.617	.007	.933	.959
KNOWMOD	.954	.006	7729	7265	2.623	.007	.942	.967
EVERUSE	.648	011	8435	7962	2.129	.017	.626	.670
CYCLE	,204	.011	8435	7962	2.403	.052	.183	.225
CURRUSE	.509	.012	7729	7265	2.047	.023	.486	.532
USEPIL	.160	.010	7729	7265	2.362	.061	.141	.180
USEIUD	.155	.009	7729	7265	2.110	.056	.138	.173
USEFST	.035	.003	7729	7265	1.407	.085	.029	.040
USECON	.018	.003	7729	7265	1.710	. 143	.013	.023
USEPER	,011	.001	7729	7265	1.180	. 129	.008	.013
GOVSOURC	.783	.013	3938	3501	2.049	.017	.757	.810
CEB	3,126	.042	8435	7962	1.600	.013	3.042	3.210
CEBSURV	2.676	1 .035	8435	7962	1.605	.013	2.606	2.747
NOMORE	,550	1,009	7729	7265	1.648	.017	.531	.568
DELAY	. 262	.008	7729	7265	1.546	.029	.247	.278
IDEAL	2.909	.027	7637	7129	2.083	.009	2.855	2.964
BREASTF	26.687	.511	8435	7962*	1.328	.019	25,665	27,709
AMENOR	11.845	.406	8435	7962*	1.304	.034	11.034	12.657
ABSTAIN	6.053	.349	8435	7962*	1.369	.058	5.355	6.751
ATTENT	.305	.017	8435	7962*	2.280	.056	.271	.339

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.8 Sampling errors for Outer Java-Bali I, NICPS, 1987

		Stan-	Unwei -	Weight- ed		Rela-	Confiden	ce limits
Variable	Value	dard error	ghted number	· ·	Design effect	tive error	R-2SE	R+2SE
URBAN	209	.029	2379	3430	3.442	.137	.151	.266
EDUC	.121	.014	2379	3430	2.105	.116	.093	.149
KNOW	.916	.017	2379	3430	2.962	.018	.882	.950
KNOWHOD	.915	.018	2208	3191	2.960	.019	.880	.950
EVERUSE	.564	.023	2379	3430	2.266	.041	.518	.610
CYCLE	.126	.014	2379	3430	2.045	.111	.098	.153
CURRUSE	.417	.022	2208	3191	2.071	.052	.373	.460
USEPIL	.162	.015	2208	3191	1.957	.095	.131	.193
USEIUO	.087	.017	2208	3191	2.758	. 191	.054	.120
USEFST	.026	.009	2208	3191	2.591	.341	.008	.043
USECON	.011	.003	2208	3191	1.240	.255	.005	.016
USEPER	.013	.003	2208	3191	1.273	.237	.007	.019
GOVSOURC	846	.022	819	1136	1,743	.026	.802	.890
CEB	3.968	.090	2379	3430	1.551	.023	3.789	4.147
CEBSURV	3.385	.081	2379	3430	1.667	.024	3.222	3.547
NOMORE	.441	.016	2208	3191	1.548	.037	.409	.474
DELAY	.275	.011	2208	3191	1,199	.041	.252	.298
IDEAL	3,926	.101	1965	2790	2.468	.026	3.724	4.128
BREASTF	23,235	.866	2379	3430*	1.555	.037	21.503	24.967
AMENOR	9.937	.493	2379	3430*	1.094	.050	8.952	10.923
ABSTAIN	4.331	.415	2379	3430*	1.207	.096	3.501	5.161
ATTENT	.469	.042	2379	3430*	2.892	-089	.386	.552

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

Table B.2.9 Sampling errors for Outer Java-Bali II, NICPS, 1987

	)	Stan- dard	Unwei- ghted	Weight- ed	Design	Rela- tive	Confiden	ce limits
Variable	Value	error	number	number	effect	error	R-2SE	R+2SE
URBAN	.200	.054	1070	492	4.438	.272	.091	.308
EDUC	.206	.038	1070	492	3.080	.185	.130	.282
KNOW	.934	.020	1070	492	2.600	.021	.895	.974
KNOWMOD	.929	.021	982	451	2.516	.022	.888	.971
EVERUSE	.559	.034	1070	492	2.250	.061	.490	.627
CYCLE	.181	.016	1070	492	1.397	.091	. 148	.214
CURRUSE	.396	.037	982	451	2.355	.093	.322	.470
USEPIL	153	.025	982	451	2,182	.164	.103	.204
USEIUD	.084	.015	982	451	1.749	.184	.053	.115
USEFST	.015	.005	982	451	1.293	.338	.005	.025
USECON	.014	.004	982	451	1.168	.309	.005	.023
USEPER	.020	.006	982	451	1.307	.294	.008	.031
GOVSOURC	.923	.021	333	153	1.405	.022	.882	.964
CEB	3.844	.093	1070	492	1.113	.024	3.659	4.030
CEBSURV	3.259	.073	1070	492	1.057	.022	3.113	3.404
NOMORE	.438	.016	982	451	1.006	.036	-406	.469
DELAY	.319	.019	982	451	1.303	.061	.280	.358
IDEAL	3.733	.103	936	424	2.401	.028	3.527	3.940
BREASTF	21.322	.821	1070	492*	1.127	.039	19.680	22,964
AMENOR	8.400	.702	1070	492*	1.188	.084	6.996	9.803
ABSTAIN	4.003	.498	1070	492*	1.056	.124	3.007	5.000
ATTENT	.316	.057	1070	492*	3.051	.182	.201	.431

<sup>\*</sup> Based on number of births, obtained through number of ever-married women.

## APPENDIX C

# LIST OF PERSONS INVOLVED IN THE 1987 NATIONAL INDONESIA CONTRACEPTIVE PREVALENCE SURVEY

### APPENDIX C

# LIST OF PERSONS INVOLVED IN THE 1987 NATIONAL INDONESIA CONTRACEPTIVE PREVALENCE SURVEY

### STEERING COMMITTEE

Dr. Haryono Suyono National Family Planning Coordinating Board (NFPCB)

Azwar Rasjid Central Bureau of Statistics (CBS)

Peter P. Sumbung, MD, MPH NFPCB Sugito, MA CBS

Prof. Dr. Kartomo Wirosuhardjo Ministry of Population and Environment (MOPE)

Srihartati P. Pandi, MD, MPH NFPCB
Soegeng Waloeyo, MPH NFPCB
Soetedjo Muljodihardjo NFPCB
H. Machjuddin, MD NFPCB
Dr. Pudjo Rahardjo NFPCB
Sardin Pabbadja NFPCB

Dr. Budi Suradji National Development Planning Board

Dr. H. Edeng H. Abdurahman MOPE Si Gde Made Mamas, MA CBS

Dr. Sofyan Effendi Population Studies Center, Gajah Mada

University, Yogyakarta

Budi Utomo, MD, MPH Faculty Public Health, Indonesia University

Gary Lewis USAID/NFPCB

Sahala Pandjaitan, MD NFPCB Hermina Sutedi, MD NFPCB Sunarti Sudomo, MD NFPCB

Dr. Carol Carpenter-Yaman, MPH USAID/Jakarta (Ex Officio Member)
Kazuko Kano/Uyen Luong UNFPA/Jakarta (Ex Offico Member)

#### TECHNICAL TEAM IN CBS

Si Gde Made Mamas, MA
Hariadi, MSc
Sri Budianti, MS
S. Happy Hardjo
Sri Poedjastoeti, MSc
S. Purwanto

Mulyono Muah, MSc Sri Moertiningih Adioetomo, MA
Dr. Hananto Sigit Demography Institute. Faculty of
Dr. Sudarti Surbarkti Economics, Indonesia University

Toto E. Sastrasuanda, MS Azwini Kartoyo

Bambang Sudiro, MSc Demography Institute. Faculty of Wagiyo Ecomonics, Indonesia University

# SURVEY FIELD STAFF BY PROVINCE

D.I. Aceh Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	A.K. Hasibuan, MSc Halim Effendi Kastabuan Saniah 1. Ummi Salamah 2. Siti Rodiah	North Sumatra Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Budiharto Nursyiwan Adnans Baswedan, A.J. Sri Andriani 1. Elfrida Norani 2. Tri Murti 3. Nurmauli L.G.
West Sumatra Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Susilo, MSc Suharja Yasril Gazali Rusyda 1. Harlina Yenny 2. Lily Suryani	Riau Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Susilo, MSc Azwar Thalib Anwar Pane Dewi Kristiani 1. Yulinda 2. Ermiati 3. Juriati
South Sumatra Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	T.A. Suprono A. Halim M. Sairi Yuzairina 1. Halimah 2. Mariam Elly	Bengkulu Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Kaharso R. Nurwansyah Hariadi Endang T 1. Eka Prihatini 2. Lela Husni
Lampung Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Samadi, MSc Anwar Bambang Sutomo Risma Pijayatini 1. Sartini Kustiawati 2. Mastinah		
DKI Jakarta Chief, Statistics Office Field Coordinator	Sukmadi, MS Bambang Sudiro, MSc		
Team 1 Supervisor Field Editor Interviewers	Bambang Santoso Tri Lestari 1. Halimah 2. Ratna Asih 3. Titi Ruaah 4. Hakimah	Team 2 Supervisor Field Editor Interviewers	Johnny Anwar Umy 1. Lience 2. Sukma 3. Manyani 4. Limah
Team 3 Supervisor Field Editor Interviewers	Chayun Arsiyadi Lics Raharti 1. Ken Winarti 2. Zaitun 3. Suwarni 4. Isnarila		

West Java Chief, Statis Field Coord		Suwondho Hp, MSc M. Ayub Rusyadi			
Team 1	Supervisor Field Editor Interviewers	Warso Suryana Leoni Maria Triwahyuni 1. Novi Ariani 2. Cucu Sartika 3. Anne Maryani	Team 2	Supervisor Field Editor Interviewers	Achmad Kuryatin Lies R. Permanasari 1. Eni Hendiani 2. Siti Juaniah 3. Euis Rochayati
Team 3	Supervisor Field Editor Interviewers	Da'im Sri Daty 1. Ida Royandiah 2. Kantirina Rahayu 3. Nurhaeni			
Central Java Chief, Stati Field Coord	stics Office	H. Marlan Hendro Daryono			
Team 1	Supervisor Field Editor Interviewers	Soedaryanto I. Purwaningsih 1. Indraningsih 2. Yuli Purwanti 3. Woro Yuli 4. Sulimah	Team 2	Supervisor Field Editor Interviewers	Satoto Azizah 1. Endany Widarti 2. Mutia Farida M. 3. Rita Atmi Tsany 4. Rup Retno Adjiningsih
Team 3	Supervisor Field Editor Interviewers	Suwarno Siti Chotijah 1. Wahyu Handayani 2. Wijayanti 3. Yuningsih			
D.I. Yogyak Chief, Stati Field Coor	istics Office	Suharto D. Syarifah			
Team 1	Supervisor Field Editor Interviewers	Soeroso Sri Budi Rahayu 1. Th Aviantari 2. Sri Setiadi Soeroso 3. Retno Yuliati	Team 2	Supervisor Field Editor Interviewers	Tohirman Anna Lisa Pudjiastuti 1. Liliek Astiari 2. Sri Suyati 3. Susilowati

4. Yuniarsih Sumardiati

4. Kukuh Irianingsih

East Java Chief, Statistics Office Field Coordinator	Sutopo M., MSc P. Hastutiningsih, MSc		
Team 1 Supervisor Field Editor Interviewers	Bambang Suprianto Lilik Indrayani 1. Indah Prihani 2. Yualina Hastuti Partiwi 3. Herlina 4. Lilik Budiartati	Team 2 Supervisor Field Editor	Dodo Sarwanto Tuty Wrediningih 1. Ika Sulikah 2. Yulinda 3. Purbo Rahayu 4. Sutji Madurini
Team 3 Supervisor Field Editor Interviewers	Musahery Nela Octaviana 1. Fatimah 2. Ngatemi 3. Tutik Setyawati		
Bali Chief, Statistics Office Field Coordinator	Slamet Mukeno, MA Ida Komang Wisnu		
Team 1 Supervisor Field Editor Interviewers	I Wayan Panta Nugrahini Pendit 1. Ni Nengah Riandani 2. Luh Putu Srinadi 3. Nini Waniati 4. Masrani	Team 2 Supervisor Field Editor	A.A Ngurah Wijaya Luh Suratni 1. Nimo Wartini 2. Ninengah Karni 3. Kartini 4. Widianingsih
West Nusa Tenggara Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	M. Machin Ervan, MSc Zaini Afin Lalu Tohran Wahyudiarti 1. Sri Sulastri 2. B. Eny Sukriani	West Kalimantan Chief, Statistics Office Field Coordinator Field Editor Editors	Habil Iskandar Amir Surya Suriana 1. Emi Kurnia 2. Ade Yusfita 3. Suriana
South Kalimantan Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Mukadi, MSc Zainudin B.N Thain Nuzami Rusmiati 1. Zaimatul Zaniah 2. Sukasih	North Sulawesi Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	<ul><li>T. Datau</li><li>Herman B. Yusof</li><li>M. Wahyudi</li><li>Wisye Damal</li><li>1. Norma Regar</li><li>2. Femmy Pangemanan</li></ul>
Central Sulawesi Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Armuni Umar Kamdin Kiamas Yasin Matampuku Sartin 1. Sartin Jauhari 2. Urismawaty	South Sulawesi Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers	Tarkaya, MSc M. Widyatama M. Anis Syuaib Rosmini Umar 1. Nurbaety Setram 2. Nani Ishak

3. Insana

3. Olivia

4. Margaretha

## South East Sulawesi

Chief, Statistics Office Field Coordinator Supervisor Field Editor Interviewers Mulyadi S, MSc Woon Laola M. Ratman Haslinda

Nursiah Laiboe
 Siti Umroh

# APPENDIX D SURVEY QUESTIONNAIRES

### [Reduced from original]

# 1987 NATIONAL INDONESIAN CONTRACEPTIVE PREVALENCE SURVEY HOUSEHOLD SCHEDULE

IDENTIFICATION						
1. PROVINCE . 2. REGENCY/MUI	NICIPALI	τγ	• • • • • • • • • • • • • • • • • • • •	******		
3. SUB-DISTRI					<b>-</b> [	
4. VILLAGE		<del> </del>			<b>-</b> [	
S. AREA1	URBAN	2 RURAI	L	• • • • • • •		
6. ENUMERATION	N AREA N	UMBER			- I	:
7. CENSUS BLO	NUMBER				[	
8. SSN 87 SAME	LE CODE	•••••	• • • • • • • • • • • •	•••••		
9. NICPS SAMPI	E COOE	•••••				
10. HOUSEHOLD I	UMBER					
11. NAME OF HOL	JSEHOLD	HEAD			_ [	
			INTERVIEWER	VISI <b>T</b> S		
		1	2	3	FIN	IAL VISIT
DATEINTERVIEWER'S	NAME					ERV.
WEXT VISIT:	DATE TIME			. 51 % 5		AL NUMBER VISITS
*RESULT CODES  1 COMPLETED 2 HH PRESENT B COMPETENT F	IUT NO	4 R 5 U	POSTPONED REFUSED WELLING VAC		8 0	WELLING NOT FOUND
AT HOME		6 0	WELLING DES	TROYED		
	FIELD	EDITED BY	OFFICE EDI	TEN BY	KEAEU BA	
NAME						KEYED BY
DATE	-			-		

NAMES OF USUAL RESIDENTS	RELATIONSHIP	<b>S</b> EX	AGE	WOMEN 10	AND ABOVE
Please give me the names of the persons who usually live in your household, starting with the head of the house- hold.  (1)  LINE NO.	What is the relationship of (NAME) to other persons already re- corded in the household? (2)	Is (MAME) male or female? (3)	How old is he/ she?  (4)	Has (NAME) ever been married?	What is the high- est level of school (NAME) com- pleted? (6)
v 01		1 2	ָן רודן <b>וֹ</b>	1 2	<b>l</b> 🖂
02		1 2		1 2	
03		1 2		1 2	
04		1 2		1 2	
05		1 2		1 2	
06		1 2		1 2	
07		1 2		1 2	
08		1 2		1 2	
09		1 2		1 2	
10		1 2		1 2	
11		1 2		1 2	
12		1 2		1 2	
TICK HERE IF CONTINUATION SHEET USED  CIRCLE LINE NO. FOR ALL EVER-MARRIED WOMEN age 15 - 49.  TOTAL NUMBER OF ELIGIBLE WOMEN IN HOUSEHOLD  *CODES FOR EDUCATION LEVEL NONE					
Just to make sure that I have this right:					
1) Are there any other persons such as small children or infants that we have not listed?  YES NOTE IN TABLE  NOTE IN TABLE					
2) Are there any other people who may not be members of your family, such as servants, friends or lodgers, but who usually live here?					
<ol> <li>Are there any other guests have been temporarily stayi the past six months or more</li> </ol>	ing with you for	YE	s> •	ENTER NAME: IN TABLE	s NO
4) Are there any persons who who have been away for less			₂□, ;	ENTER NAME: IN TABLE	s NO
5) Are there any persons we had been away for the past six	ave listed who ha months?	ave YE	s, '	PELETE NAMO FROM TABLE	

# 1987 NATIONAL INDONESIAN CONTRACEPTIVE PREVALENCE SURVEY HOUSEHOLD CONTINUATION SHEET

NAMES OF USUAL RESIDENTS	RELATIONSHIP	SEX	AGE	MOMEN 10	AND ABOVE
Please give me the names of the persons who usually live in your household, starting with the head of the house- hold.	What is the relationship of (NAME) to other persons already recorded in the household?	Is (NAME) male or female?	How old is he/ she?	Has (NAME) ever been married?	What is the high- est level of school (NAME) com- pleted?
(1)	(2)	(3)	(4)	(5)	(6)
LINE MO.    -   13		M F   1   1   2	YEARS	YES NO	LEVEL*
14		1 2		1 2	
15		1 2		1 2	
16		1 2		1 2	ΙΠ
17		1 2		1 2	
18		1 2		1 2	
19		1 2		1 2	
20		1 2		1 2	
21		1 2		1 2	 
22		1 2		1 2	
23		1 2		1 2	
24		1 2		1 2	
25		1 2		1 2	
CIRCLE LINE NO. FOR ALL EVER-M TOTAL NUMBER OF ELIGIBLE WOMEN		15 - 49.	NONE SOME P	O J RIMRY.1 S TED A	R. HIGH3 R. HIGH4 CAD/UNIV.5 K6

### (Reduced from original)

# 1987 NATIONAL INDONESIAN CONTRACEPTIVE PREVALENCE SURVEY INDIVIDUAL WOMAN'S QUESTIONNAIRE

			IDENTIFI	CATION		
1. PROVINCE 2. REGENCY/MUN	ICIPAL	ITY	*********	• • • • • • • • • • • • • • • • • • • •	•	
3. SUB-DISTRIC 4. VILLAGE 5. AREA1	URBAN.	2 RURA	L			
7. CENSUS BLOK 8. SSN 87 SAMPL 9. NICPS SAMPLI 10. HOUSEHOLD M 11. NAME OF HOUSE 12. LINE NUMBER	HUMBEI LE CODE E CODE UMBER SEHOLD OF WOR	HEAD	USEHOLD SCH		-	
			INTERVIEWER	VISITS	- !	
		1	2	3	FII	HAL VISIT
DATE	NAME				IN	TERV
NEXT VISIT:	DATE TIME			:		AL NUMBER //ISITS
(*) RESULT COC	E\$		TED 3	POSTPON REFUSED		ARTLY COMPLETED
NAME DATE	FIELD	EDITED BY	OFFICE EDI	TED BY	KEYED BY	KEYED BY

## SECTION 1: RESPONDENT'S BACKGROUND.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD NUMBER OF PEOPLE LISTED IN THE HOUSEHOLD SCHEDULE.	NUMBER OF PEOPLE	
103	RECORD THE TIME AT START OF INTERVIEW.	HOUR	
104	First I would like to ask some questions about yourself and your household. For most of the time until you were 12 years old, did you live in a village, in a town, or in a city?	VILLAGE	
105	How tong have you been living continuously in (NAME OF VILLAGE)?	ALWAYS95	->107
106	Just before you moved to (NAME OF VILLAGE) did you live in the village, in a town, or in a city?	VILLAGE	
107	In what month and year were you born? IF MONTH NOT IN WESTERN CALENDAR, WRITE NAME:	MONTH	
108	How old were you at your last birthday? COMPARE 107 AND 108 AND CORRECT IF INCON- SISTENT. IF AGE IS <15 OR >49, STOP.	AGE IN COMPLETED YEARS	
108A	Are you now married, widowed, divorced or separated?	MARRIED	<del>-</del>
109	Have you ever attended school?	YES1	->113
110	What was the highest level of school you attended: primary, junior high, senior high, academy, or university?	PRIMARY.SCHOOL	->111
110A	Was that a vocational or general high school?	GENERAL	

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
111	What was the highest grade (class) you completed at that level? IF COMPLETED LEVEL, CODE 7.	GRADE/ CLASS
112	CHECK 110: PRIMARY JUNIOR HIGH SCH	100L OR HIGHER ->114
113	Can you read a letter or newspaper easily, with difficulty, or not at all?	EASILY
114	Do you usually read a newspaper or a magazine at least once a week?	YES
115	Do you usually watch television at least once a week?	YES1 NO2
116	Do you usually listen to a radio every day?	YES1 NO2
117	What is the major source of drinking water for members of your household?	PIPE
118	What is the major source of water for household use other than drinking (e.g. washing, cooking) for members of your household?	PIPE
120	What kind of toilet facility does your household have?	PRIVATE, WITH SEPTIC T1 PRIVATE, NO SEPTIC TANK.2 SHARED/PUBLIC

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
122	Does your household have or have access to: Electricity? A radio or cassette? A television? A gas, kerosene, or electric stove?	YES NO ELECTRICITY	
123	Does any member of your household have or have access to: A non-motor vehicle? A motor vehicle?	YES NO NON-MOTOR VEHICLE 1 2 MOTOR VEHICLE 1 2	
124	MAIN MATERIAL OF THE FLOOR.	TILE	
130	What religion are you?	MUSLIM	

## SECTION 2: REPRODUCTION.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES1	->206
202	Do you have any son or daughter you have given birth to who is now living with you?	YES	->204
203	How many sons live with you? And how many daughters live with you? IF NONE ENTER ZEROS <00>.	SONS AT HOME	
204	Do you have any son or daughter you have given birth to who is alive but does not live with you?	YES	->206
205	How many sons live elsewhere? How many daughters live elsewhere? IF NONE ENTER ZEROS <00>.	SONS ELSEWHERE DAUGHTERS ELSEWHERE	
206	Have you ever given birth to a boy or a girl who was born alive but later died?  IF NO, PROBE: Any (other) boy or girl who cried or showed any signs of life but only survived a few hours or days?	YES1	->208
207	How many boys have died? And how many girls have died? IF NONE ENTER ZEROS <00>.	BOYS DEAD	
208	SUM ANSWERS TO 203, 205, 207, AND ENTER TOTAL. IF NONE ENTER ZEROS <00>.	TOTAL	
209	CHECK 208:  Just to make sure that I have this right, you live births during your life? Is that correct 201-	ect?	
210	CHECK 208: ONE OR MORE LIVE BIRTHS NO LIVE BIRTH	ıs 🗆 📗	->221

211 Now I would like to talk to you about all of your births, whether still alive or not, starting with the first birth you had.

RECORD THE NAMES OF ALL LIVE BIRTHS THAT THE WOMAN HAD STARTING WITH THE FIRST BIRTH ON LINE ONE. FILL IN THE NAMES OF ALL CHILDREN, WHETHER OR NOT THEY ARE STILL ALIVE AND THEN ASK QUESTIONS 213-218 AS APPROPRIATE FOR EACH CHILD. RECORD TWINS ON SEPARATE LINES AND MARK WITH A BRACKET.

212 What name was given to your (first, next) birth?	213 Is (NAME) a boy or a girl?	214 In what month and year was (NAME) born? IF MONTH NOT WESTERN, WRITE NAME.	215 Is (NAME) still alive?	216 IF DEAD: How old was (MAME) when he/she died? RECORD DAYS IF UNDER 1 MONTHS IF UNDER 2 YEARS OR YEARS IF MORE THAN 2 YEARS.	217 IF ALIVE: Now old was (NAME) at his/her last birthday?	218 IF ALIVE: Is he/ she living with you now? now?
01	BOY1	MONTH YEAR.	YES1 GO TO 217<- NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
02	BOY1	MONTH YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
03	BOY1	MONTH YEAR.	YES1- GO TO 217- NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
04	BOY1	MONTH YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
05	BOY1	MONTH YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
06	BOY1	MONTH YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
07	BOY1	MONTH YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
08]	BOY1	MONTH YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1

	st, )	213 Is (NAME) a boy or a girl?	214 In what month and year was (MAME) born? IF MONTH NOT WESTERN, URITE NAME	215 Is (MAME) still alive?	216 IF DEAD: HOW old was (NAME) when he/she died? RECORD DAYS IF UNDER 1 MONTHS IF UNDER 2 YEARS OR YEARS IF MORE THAN 2 YEARS.	217 IF ALIVE: How old was (NAME) at his/her last birthday?	218 IF ALIVE: Is he/ she living with you now? now?
99		BOY1	MONTH YEAR.	YES1- GO TO 217<- NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
10		BOY1	YEAR.	YES1- GO TO 217- NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
<u> </u>		BOY1	YEAR.	YES1- GO TO 217< NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
12		BOY1	YEAR.	YES1- GO TO 217<- NO2	DAYS 1 MONTHS 2 YEARS 3 GO TO NEXT BIRTH	AGE	YES.1
219 221	9 CHECK 208 AND NUMBER OF BIRTHS IN 212 (BIRTH HISTORY):  NUMBERS ARE SAME UMBERS ARE DIFFERENT (PROBE AND RECONCILE)						
<b>2</b> 22	For ho	w many m	onths have you	been pregnan	t? MONTHS	····	<b>i</b> →227
226	How long ago did your last menstrual period start?  DAYS AGO						
227	When during her monthly cycle do you think a woman has the greatest chance of becoming pregnant?  PROBE: What are the days during the month when a woman has to be careful to avoid becoming pregnant?			st chance	BEGINS AT ANY TIME OTHER	R PERIOD	
228	PRESENT	CE OF OTH	HERS AT THIS PO	DINT:	CHILDREN UNDER HUSBANDOTHER MALES	1 2	

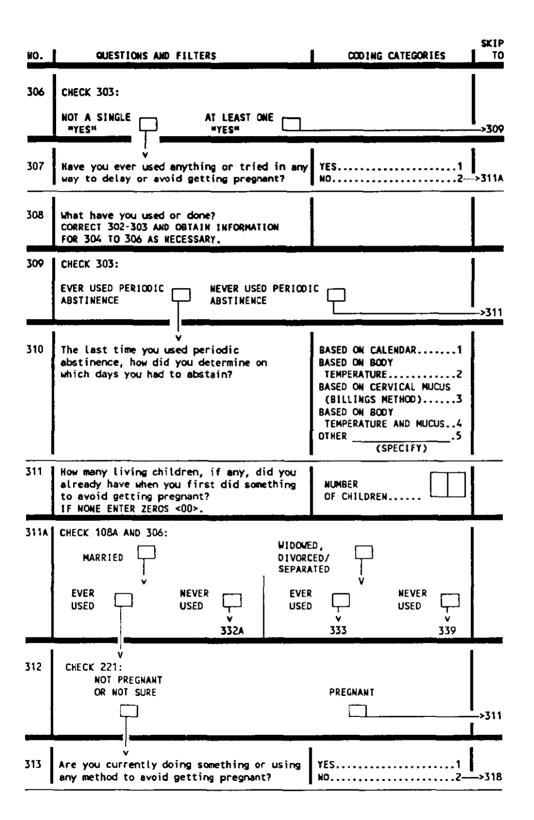
### SECTION 3: KNOWLEDGE AND PRACTICE OF BIRTH CONTROL (FAMILY PLANNING)

301 Now I would like to talk about a different topic. There are various ways that a couple can delay or avoid a pregnancy or a birth. Which of these methods have you heard of?

- a) CIRCLE CODE 1 IN 302 FOR EACH METHOD MENTIONED SPONTANEOUSLY.
  b) FOR EACH METHOD NOT MENTIONED SPONTANEOUSLY READ THE NAME AND DESCRIPTION, THEN ASK 302 AND CIRCLE CODE 2 IF METHOD IS RECOGNIZED. CIRCLE CODE 3 IF METHOD IS NOT RECOGNIZED.
- c) THEN ASK 303-305 FOR EACH METHOD THAT WAS CODED EITHER 1 OR 2 IN 302.

	302 Have you ever heard of (READ HETHOD AND DESCRIPTION)?	303 Have you ever used (METHOD)	304 Where would you go to obtain (METHOD) if you wanted to use it? (CODES BELOW)*	305 What is the main problem, if any, with using (METHOD)?  (CODES BELOW)**
PILL "Women can take a pill every day."	YES/SPON1 YES/PRBD2 NO3—	YES1	OTHER:	OTH:-
IUD "Women can have a loop or coil placed inside them by a doctor or a nurse."	YES/SPON1 v YES/PRBD2 NO3	YES1	OTHER:	OTH:-
INJECTIONS "Women can have an injection by a doctor or nurse which stops them from becoming pregnant for several months."	YES/SPON1 YES/PRBD2 NO3	YES1	OTHER:	
DIAPHRAGH, FOAM, JELLY "Women can place a sponge or supposi- tory or diaphragm or jelly or cream inside them immediately before intercourse."	YES/SPOH1 YES/PRBD2 NO3	YES1	OTHER:	OTH:
CONDOM, RUBBER, DUREX "Men can use a rubber sheath during sexual intercourse."	YES/SPON1 YES/PRBD2 NO3—	YES1	OTHER:	тнт.
*CODES FOR 304:  FP CLINIC/HEALTH CENTER/H FAMILY PLANNING FIELDWORK FP POST/ COMHUNITY ORGANI FP MOBILE UNIT (TKBK/THK) SAFAR1/CAMPAIGN PHARMACY/SHOP PRIVATE DOCTOR PRIVATE MIDWIFE PUBLIC HEALTH POST (POSYA TRADITIONAL HEALER (DUKUN OTHER	22AT10N 02 2AT10N 03 04 05 06 07 08 NDU) 09 ) 10 11		MONE	02 03 04 05 06 07 08

	302 Have you ever heard of (READ METHOD AND DESCRIPTION)?	303 Have you ever used (METHOD)	304 Where would you go to obtain (METHOD) if you wanted to use it? (CODES BELOW)*	305 What is the main problem, if any, with using (METHOD)? (CODES BELOW)**
FEMALE STERILIZATION "Women can have an operation to avoid having any more children."	YES/SPON1 YES/PRBO2 NO3—	YES1	OTHER:	OTH:
MALE STERILIZATION "Men can have an operation to avoid having any more children."	YES/SPON1 YES/PRBD2 NO3-	YES1	OTHER:	ОТН:
NORPLANT "Women can have small rods put in the arm to stop get- ting pregnant."	YES/SPON1 YES/PRBD2 NO3-	YES1		ОТН:
ABORTION **Women can do something to get rid of a pregnancy.**	YES/SPON1 YES/PRBD2 NO3	YE\$1		
PERIODIC ABSTINENCE, CALENDAR "Couples can avoid having sex- ual intercourse on certain days of each month when the woman is more likely to get pregnant."	YES/SPON1 YES/PRBD2 NO3	YES1	Where would you go to obtain advice about (METHOD)?	OTH:
WITHDRAWAL "Men can be careful and pull out before climax."	YES/SPON1 YES/PRBD2 NO3—	YES1 NO2	*CODES FOR 304:	OTH:
ANY OTHER METHODS? "Have you heard of any other ways or methods that women or men can use to avoid pregnancy?" SPECIFY  a	YES/SPON1-NO3-V  ASK 303-305 FOR EACH METHOD KNOWN EITHER SPONTA-NEOUSLY OR AFTER PROBING.	8. YES1 NO2 b. YES1 NO2 c. YES1	FP CLINIC/HEALTH CENTER/ HOSPITAL01 FAMILY PLANNING FIELDWORKER	NONE01 NOT EFFECTIVE02 HUSBAND DISAPPROVES03 HEALTH CONCERNS.04 ACCESS/AVAIL05 COSTS TOO MUCH06 INCONVENIENT TO USE07 RELIGIOUS/MORAL.08 OTHER (SPECIFY).11 DON'T KNOW98



10.	QUESTIONS AND FILTERS	CODING CATEGORIES 1
314	Which method ere you using?  CHECK 302-305 FOR THIS METHOD AND CORRECT IF NECESSARY.	PILL
314A	Do you have a package of pills in the house?	YES1 NO2—>31
315	Please show me the package of pills you are now using. (RECORD NAME OF BRAND)	BRAND:
315A	CHECK PACKET FOR PILL USE AND MARK CORRECT CODE.	PILLS MISSING IN ORDER1>31 PILLS MISSING OUT OF ORDER2 NO PILLS MISSING3
3158	Why is it that you have not taken the pills (in order)?	DOESN'T KNOW WHAT TO DO.1—HEALTH REASONS
315c	Why don't you have a package of pills in the house?	RAN OUT
315D	SHOW BRAND CHART FOR PILLS: Please tell me which of these is the brand of pills that you are using.	BRAND:  DOESN'T KNOW98
315E	When was the last time you took a pill?	DAYS AGO97
315F	CHECK 315E: TWO DAYS AGO OR	s

NO. 1	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
315G	Why aren't you taking the pill these days?	HUSBAND AWAY
315H	When did you last have an injection?	MONTHS AGO
3151	CHECK 315H:  MORE THAN THREE MONTHS THREE MONTHS AGO (LESS	>317A
3151	Why haven't you had an injection recently?	HUSBAND AWAY
315K	Please show me the package of condoms that your husband is using. RECORD NAME OF BRAND	BRAND: >317A  NOT ABLE TO SHOW98
315L	Why can't you show me the package of condoms that your husband is using?	HUSBAND KEEPS
315H	SHOW BRAND CHART FOR CONDOMS: Please tell me which of these is the brand of condoms that your husband is using.	BRAND: >317A
317	In what month and year did you (he) have the operation? IF MONTH NOT WESTERN, WRITE NAME	WHEN: MONTH YEAR
317A	How much did it cost you for this method? WRITE COST OF METHOO PLUS SERVICE.	COST
318	In the last 12 months, have you obtained a method or advice about how to avoid pregnancy?	YES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
319 OR	Where did you obtain (METHOD) the last time?	FP CLINIC/HEALTH CENTER/ HOSPITAL01 FAMILY PLANNING FIELDWORKER02 FP POST/ COMMUNITY	
319A	Where did the sterilization take place?	ORGANIZATION03 FP MOBILE UNIT04 SAFARI/CAMPAIGN05	į
OR 3198	Where or from whom did you get a method or advice?	PHARMACY/ SHOP	] <b>&gt;32</b> 1
320-	Was there anything you disliked about the service you received there?  IF YES: What?	WAIT TOO LONG	
	IF MORE THAN ONE REASON, CIRCLE MOST IMPORTANT	SERVICES/HETHOD	
321	CHECK 221:  NOT PREGNANT PRI OR NOT SURE	EGHANT	->339
322	STERILIZED USING ANOTHER	NOT CURRENTLY JS 1 NG	>332A
323	For how long have you been using (CURRENT METHOD) continuously?	DURATION: MONTHS	
324	Have you experienced any problems from using (CURRENT METHOD)?	YES	->326
325	What is the main problem you experienced? WRITE BRIEFLY AND CLEARLY.	METHOD FAILED	

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO	
326	In the same month, do you regularly use any other method than (CURRENT METHOD)?	YES1   NO2>328	
327	Which method is that?  CHECK 302-305 FOR THIS METHOD AND CORRECT IF NECESSARY.	PILL	
328	(Since your last birth), have you used any other method before (CURRENT METHOD) to avoid a pregnancy or birth?	YES1 NO2>341/	4
329	Which method did you use before (CURRENT METHOD)?	PILL	
<b>3</b> 30	In what month and year did you start using (METHOD BEFORE CURRENT)? IF MONTH NOT WESTERN, WRITE NAME	WHEN: MONTH YEAR.	
331	For how long did you use (METHOD BEFORE CURRENT) (the last time)?	DURATION: HONTHS	
332	What was the main reason you stopped using (METHOD BEFORE CURRENT) then?  IF ANSWER IS "SWITCHED TO OTHER METHOD", PROBE TO FIND REASON	METHOD FAILED02— HUSBAND DISAPPROVES03 HEALTH CONCERNS04 ACCESS/AVAILABILITY05 COSTS TOO MUCH06 INCONVENIENT TO USE07 RELIGIOUS/MORAL08 INFREQUENT SEX09 FATALISTIC10 OTHER	*

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
332A	CHECK 221:  What is the main reason that you are not using a method to avoid pregnancy?  IF PREGNANT, CIRCLE M95M.	DESIRES PREGNANCY	
3328	CHECK 306: EVER USED NEVER U	۱ ا	>339
333	CHECK 208: ANY BIRTHS?	1	<b>&gt;33</b> 5
334	Since your last birth have you used any method to avoid a pregnancy or a birth?	YES1   NO2	>339
335	Which was the last method you used?	PILL	
536	In what month and year did you start using that method ? IF MONTH NOT WESTERN, WRITE NAME	WHEN: MONTH YEAR.	
337	For how long had you been using (LAST METHOD) before you stopped using it?	DURATION: MONTHS YEARS	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	TO
338	What was the main reason you stopped using (LAST METHOD) then?	TO GET PREGNANT	
339	Do you intend to use a method to avoid pregnancy at any time in the future?	YES	341a
340	Which method would you prefer to use?	PILL	
341	Do you intend to use (PREFERRED METHOD) in the next 12 months?	YES	
341A	If a woman wants to delay the next birth, which method do you think would be best for her to use?	PILL	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	TO.
3418	If a woman has all the children she wants, which method do you think would be best for her to use?	PILL	
342	In the last month, have you heard or seen a message about family planning on the radio or on the television?	YES	
343	Did you hear or see it once or more than once?	ONCE	
344	Has a family planning fieldworker visited you in the past six months?	YES	
345	Have you ever heard of Dualima?	YES	·3458
345A	Can you tell me what it is?  DO NOT READ RESPONSES.	CONDOM	
3458	Of the sources I am going to mention, which do you think are an appropriate source for family planning information?  READ RESPONSES.	YES NO PRIVATE DOCTOR	
346			EC- TION 5

Now I would like to get some more information about (your pregnancy and) the children you had in the last five years. CHECK WHETHER PREGNANT AND RECORD NAMES OF BIRTHS SINCE JAN. 1982. THEN ENTER EVER USE OF CONTRACEPTION CHECK 306: EVER USED A METHOD (ASK 349-356 FOR EACH COLUMN) MEVER USED A METHOD (ASK 355 FOR EACH COLUMN) BIRTH ORDER CURRENTLY LAST BIRTH NEXT-TO-LAST SECOND FROM THIRD FROM ASK QUESTIONS ABOUT PREGNANT? BIRTH LAST BIRTH LAST BIRTH ALL BIRTHS YES | NO | NO (NAME) (NAME) (NAME) (NAME) 349 Before you became pregnant YES.....1 YE\$.....1 YES.....1 YES..... YES.....1 (with NAME) (but after your preceding birth, IF ANY) had NO.....2-NO..... 2-7 NO...... 2-7 NO..... 2-7 NO..... 2-7 NO..... 2-7 you done anything, even for a short time, to avoid getting SKIP TO 355 <-SKIP TO 355 <-SKIP TO 355 <-ISKIP TO 355 <-SKIP TO 355 <pregnant or having a birth? PILL.....01 PILL.....01 PILL.....01 PILL..........01 PILL...........01 IUD......02 IUD.....02 INJECTIONS....03 IUD ......02 Injections ...03 350 Which was the last 100.....02 i**uo.....**02 method you used then? INJECTIONS....03 INJECTIONS....03 DIAPH/FM/JLY..04 DIAPH/FM/JLY..04 DIAPH/FM/JLY..04 DIAPH/FM/JLY..04 DIAPH/FM/JLY..04 DIAPH/FM/JLY..04
CONDOM......05
CONDOM......05
MALE STERIL..07
NORPLANT....08
ABORTION....09
PERIODIC ABST.10
WITHDRAWAL...11
PROLNGD ABST..12
HERBS.....13
MASSAGE 14
MASSAGE 14 CONDOM.....05
MALE STERIL...07
NORPLANT....08
ABORTION....09 CONDOM......05 CONDOM......05 MALE STERIL ... 07 USE THESE CODES IN 351 MALE STERIL...07 NORPLANT,.....08 NORPLANT.....08 ABORTION.....09 ABORTION.....09 PERIODIC ABST.10 WITHDRAVAL...11 PROLNGD ABST..12 PERIODIC ABST.10 PERIODIC ABST.10 WITHDRAWAL....11 PROLNGD ABST..12 JITHDRAWAL....11 WITHDRAWAL....11
PROLNGD ABST..12 HERBS......13 HERBS......13 HERBS.....13 MASSAGE.....14 MASSAGE.....14 MASSAGE......14 MASSAGE......14 MASSAGE.....14 OTHER 15 15 OTHER 15 OTHER 15 OTHER (SPECIFY) (SPECIFY) (SPECIFY) (SPECIFY) (SPECIFY) 351 Any method before that? PRECEDING PRECEDING (RECORD CODE). (IF NONE, PRECEDING PRECEDING PRECEDING ENTER 00). METHOD METHOD METHOD METHOD METHOD DURATION: 352 For how long had you used MONTHS... DURATION: DURATION: DURATION: DURATION: MONTHS... MONTHS... MONTHS... MONTHS... YEARS.... YEARS.... (LAST METHOD) that time? YEARS.... YEARS.... YEARS.... 353 Did you become pregnant while you were still using (LAST METHOD)? TO GET PREG....01 (GO TO NEXT COL.) (GO TO NEXT COL.) (GO TO NEXT COL.) (GO TO MEXT COL.) 354. What was the main reason you stopped using (LAST NOT EFFECTIVE..02 NOT EFFECTIVE..02 NOT EFFECTIVE..02 NOT EFFECTIVE..02 NOT EFFECTIVE..02 HUSBAND DSPRVD.03 HUSBAND DSPRVD.04 HEALTH CONCERN.04 HEALTH CONCERN.04 HEALTH CONCERN.04 HEALTH CONCERN.05 ACCESS/AVAIL...05 ACCESS/AVAIL...05 ACCESS/AVAIL...05 COST TOO MUCH...06 COST TOO MUCH....06 COST TOO MUCH...06 COST METHOD)? (OTHER) Col 1 \_ Col 2 \_\_\_ INCONVENIENT INCONVENIENT INCONVENTENT INCONVENIENT INCONVENIENT TO USE......07 TO USE......07 TO USE......07 TO USE......07 Col 3 \_\_\_\_\_ TO USE.....07 INFREQUENT SEX.08 INFREQUENT SEX.08 INFREQUENT SEX.08 INFREQUENT SEX.08 INFREQUENT SEX.08 RELIG/MORAL...09 RELIG/MORAL...09 RELIG/MORAL...09 RELIG/MORAL...09 RELIG/MORAL...09 FATALISTIC.....10 FATALISTIC.....10 FATALISTIC.....10 Col 4 \_\_\_ THER (SPECIFY OTHER (SPECIFY OTHER (SPECIFY OTHER (SPECIFY OTHER (SPECIFY AT LEFT).....11 AT LEFT).....11 AT LEFT).....11 Col 5 \_ OTHER (SPECIFY pk.......98 pk......98 pk........98 pk.........98 pk..........98 355 At the time you became pregnant (with NAME), did you want to have that child then, did you want to wait until (GO TO 401) later, or did you want no (ALL TO NEXT COL) (ALL TO NEXT COL) (ALL TO NEXT COL) (ALL TO NEXT COL) (more) children at all? 356 Did you want to have that MAVE CHILD HAVE CHILD MAVE CHILD BHAVE CHILD HAVE CHILD LATER..........1 NOT HAVE CHILD.2 (GO TO 401)

# SECTION 4: BREASTFEEDING

401 CHECK 214: HAD BIRTH SIN	NCE JAN. 1982 NO	BIRTH SINCE JAN. 198	2	<u>-</u>	
(SKIP TO SECTION 5)					
402 ENTER NAME OF EACH BIRTH S	SINCE JAN, 1982. BEGI	IN WITH LAST BIRTH.	ASK QUESTIONS ABOUT AL	L BIRTHS.	
ORDER					
	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-TO-LAST BIRTH	THIRD-TO-LAST BIRTH	
	(NAME)	(NAME)	(NAME)	(NAME)	
101			1		
404 Where did you deliver (NAME)?	GENERAL HOSP1 MATERNITY HOSP2 HEALTH CENTER3 HOME4 SOMEDNE ELSE'S HOUSE5 OTHER6	GENERAL HOSP1 MATERNITY HOSP2 HEALTH CENTER3 HOME4 SOMEONE ELSE'S HOUSE5 OTHER6	GENERAL HOSP1 MATERNITY HOSP2 HEALTH CENTER3 HOME4 SOMEONE ELSE'S HOUSE5 OTHER6	GENERAL HOSP1 MATERNITY HOSP2 HEALTH CENTER3 HOME4 SOMEONE ELSE'S HOUSE5 OTHER6	
405 Who assisted with the delivery of (NAME)? PROBE FOR TYPE OF PERSON AND RECORD MOST QUALIFIED.	DOCTOR	DOCTOR	DOCTOR	DOCTOR	
406 Did you ever feed (NAME) at the breast?	YES	YES	YES	YES	
407 IF ALIVE: Are you still breastfeeding (NAME)?  IF DEAD: CIRCLE '2'.	YES				
408 How many months did you breastfeed (NAME)?	MONTHS UNTIL DEATH 96				
409 How many months after the birth of (NAME) did your period return?	MONTHS NO/NOT YET RETURNED96	MONTHS	MONTHS NOT RETURNED96 (ALL GO TO 411)	MONTHS MOT RETURNED96 (ALL GO TO 411)	
410 Have you resumed sexual re- lations since the birth of (NAME)?	YES (OR PREG)1 NO2, (GO TO NEXT COL)<				
411 How many months after the birth of (NAME) did you resume sexual relations?	MONTHS (GO TO NEXT COL)	MONTHS GO TO NEXT COL)	MONTHS GO TO NEXT COL)	MONTHS []	

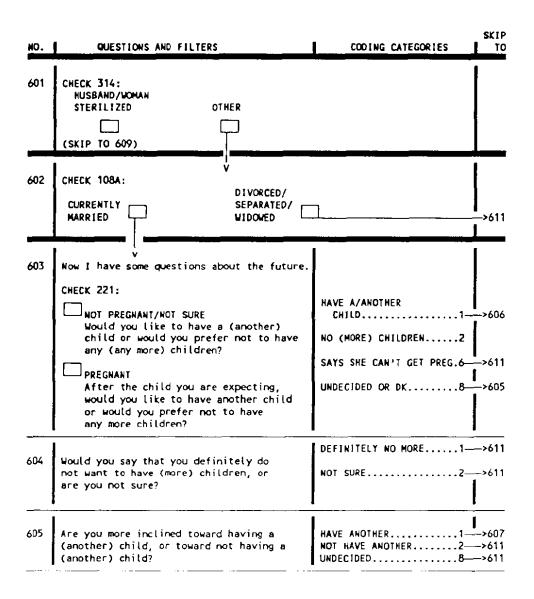
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
412	CHECK 407 FOR LAST BIRTH:  LAST CHILD ALL STILL BREAST- OTHERS FED		_→ <b>5</b> 01
413	How many times did you breastfeed (NAME OF LAST BIRTH) last night, between sundown and sunrise?	NUMBER OF TIMES CHILD SLEEPS AT BREAST.96	
414	How many times did you breastfeed (NAME OF LAST BIRTH) yesterday during the daylight hours?	MUMBER OF TIMES AS OFTEN AS WANTED96	
415	At any time yesterday or last night, was (NAME OF LAST BIRTH) given:  any powdered or tinned milk? juice or tea or soup? rice or bread or biscuits? fruits or vegetables? eggs or fish or meat? any other liquid or solid food? plain water?	YES NO POWDRD OR TIN MILK 1 2 JUICE/TEA/SOUP1 2 RICE/BREAD/BISCUIT. 1 2 FRUITS/VEGETABLES1 2 EGGS/FISH/MEAT1 2 OTHER LIQUID/SOLID1 2 PLAIN WATER	

### SECTION 5: MARRIAGE.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
501	Now I want to ask you some questions about your marriage.  CHECK 108A AND CIRCLE CURRENT MARITAL STATUS.	MARRIED1 DIVORCED/SEPARATED2 WIDOWED3	
502	Have you been married only once or more than once?	ONCE1— MORE THAN ONCE2	->504
503	How many times have you been married? IF MORE THAN EIGHT, WRITE 8.	TIMES	
504	In what month and year did you get married to your (first) husband? IF MONTH NOT GIVEN IN WESTERN CALENDAR, WRITE NAME.	MONTH	
505	Naw old were you when you (first) got married?	AGE	
511	Right after you got married, did you and your (first) husband live with his parents or your parents for at least six months?	YES1— NO2	<b>→</b> 512
511A	Why not?	PARENTS NOT ALIVE1— HAD OWN HOUSE2 OTHER3—	>514
512	How many years did you live together with a parent at that time?	YEARS96	
514	Since you were first married, how many different towns or villages have you lived in for six months or more?	NUMBER OF LOCALITIES	

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
516	Now we need some details about your sexual activity in order to get a better understanding of births. How old were you when you first had sexual intercourse?	AGE
516A	CHECK 108A:  CURRENTLY DIVORCED/ MARRIED SEPARATED	>524
517	W  Have you had sexual intercourse in the last one month?	YES
518	How many times?	TIMES
519	When was the last time you had sexual intercourse?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 BEFORE LAST BIRTH996
524	PRESENCE OF OTHERS AT THIS POINT:	YES MO CHILDREN UNDER 101 2 HUSBAND1 2 OTHER MALES1 2 OTHER FEMALES1 2

#### SECTION 6: FERTILITY PREFERENCES



NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
606	Would you say that you definitely want a (another) child, or are you not sure?	DEFINITELY MORE
607	How long would you like to wait from now before the birth of a (another) child?	MONTHS1 >611 YEARS2 >611 DON'T KNOW998
608	CHECK 215:  Now old would your youngest child be at the birth of the next child?  IF NO LIVING CHILDREN, CIRCLE 1961.	YEARS96 >611 DK98
609	Do you regret that you (your husband) had the operation not to have any more children?	YES1 NO2—>611
610	Would you like to have another child or would you prefer not to have any more children?	HAVE ANOTHER
611	CHECK 202 and 204:  HAS NO LIVING CHILDREN:  If you could choose exactly the number of children to have in your whole life, how many would that be?  HAS LIVING CHILDREN:  If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?  RECORD SINGLE NUMBER, RANGE OR OTHER ANSWER	NUMBER
611A	Now many boys and how many girls?	BOYS.

#### SECTION 7: HUSBAND'S BACKGROUND AND WORK.

NO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
	ASK QUESTIONS ABOUT CURRENT OR MOST RECEN	IT HUSBAND
702	Now I have some questions about your (most recent) husband.  Did your husband ever attend school?	YES1 NO2—>706
703	What was the highest level of school he attended: primary, junior high, senior high academy or university?	PRIMARY
703A	Was that a vocational or general high school?	GENERAL1 VOCATIONAL2
704	What was the highest grade/class he completed at that level? IF COMPLETED LEVEL, CODE 7.	GRADE/CLASS
705	CHECK 703:  PRIMARY OR HIGH OR HIGHER	>707
706	Can (could) he read a letter or newspaper easily, with difficulty, or not at all?	EASILY
707	What kind of work does (did) your husband mainly do?  DESCRIBE	PROFSSIONAL, TECHNICAL AND CLERICAL
708	CHECK 707: DOES (DID) HOT WORK WORKS (WORKED) IN AGRICULTURE IN AGRICULTURE	7711

MO.	QUESTIONS AND FILTERS	SKIP CODING CATEGORIES TO
709	Does (did) he earn a regular wage or salary?	YES1————————————————————————————————
711	Does (did) he work mainly for money or a share of the crops?	MONEY
712	Before you married your (first) husband, did you ever work regularly to earn money?	YES1 NO2
714	Since you were first married, have you ever worked regularly to earn money?	YES
717	Are you now working to earn money?	YES1
718	RECORD THE TIME AT END OF INTERVIEW.	HOUR

# SECTION 8: INTERVIEW PARTILCULARS

NO.	QUESTIONS AND	FILTERS	CODING CATEGORIES	SK1P TO
801	IN WHAT LANGUAGE DI INTERVIEW?	D YOU CONDUCT THE	BAHASA INDONESIA	
802	FOR HOW MUCH OF THE DEPEND ON A THIRD P FOR YOU?		NONE OF THE INTERVIEW1 SOME OF THE INTERVIEW2 MOST OF THE INTERVIEW3 ALL OF THE INTERVIEW4 OTHER	
		INTERVIEWER'S OBSERVA	TIONS	
Name	of Interviewer:		Date:	<del>-</del> 
		SUPERVISOR'S OBSERVA	TIONS	
Name	of Supervisor:		Date:	
		EDITOR'S OBSERVATIO	DNS	
	of Field Editor:		Date:	

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