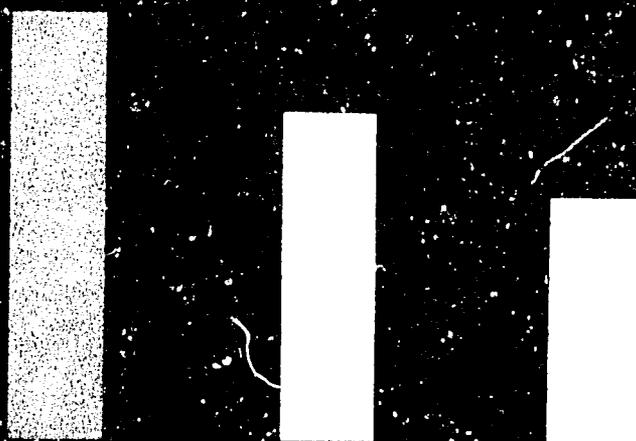


# Indonesia



Demographic and  
Health Survey  
1991

# INDONESIA DEMOGRAPHIC AND HEALTH SURVEY 1991

## SUMMARY REPORT

Background .....	3
Fertility .....	4
Levels and Trends .....	4
Marriage .....	5
Fertility Preferences .....	6
Family Planning .....	7
Knowledge and Use of Family Planning .....	7
Source of Family Planning Services .....	9
Contraceptive Failure and Discontinuation .....	10
Unmet Need for Family Planning .....	10
Maternal and Child Health .....	11
Infant and Child Mortality .....	11
Antenatal Care and Assistance at Delivery .....	12
Infant Feeding .....	13
Immunization .....	14
Treatment of Childhood Diseases .....	15
Conclusions .....	16
Fact Sheet .....	19



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2

This report summarizes findings of the 1991 Indonesia Demographic and Health Survey (IDHS) conducted by the Indonesia Central Bureau of Statistics, the National Family Planning Coordinating Board, and the Ministry of Health. Macro International provided funding and technical assistance. Additional funding for the survey was provided by USAID/Jakarta, UNFPA, and the Government of Indonesia.

The IDHS is part of the worldwide Demographic and Health Surveys program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information on the Indonesia survey may be obtained from the Central Bureau of Statistics, Jl. Dr. Suromo 8, Jakarta 10710, Indonesia (Telephone 372808), or the National Family Planning Coordinating Board, Jl. Let. Jen. M.T. Haryono, Jakarta 10002, Indonesia (Telephone 8009029), or the Ministry of Health, Institute for Health Research and Development, Jl. Percetakan Negara 29, P.O. Box 1226, Jakarta 10440, Indonesia (Telephone 414146). Additional information about the DHS program may be obtained by writing to: DHS, Macro International Inc., 8850 Stanford Boulevard, Suite 4000, Columbia, Maryland 21045, USA (Telephone 410-290-2800; Telex 198116; Fax 410-290-2999).



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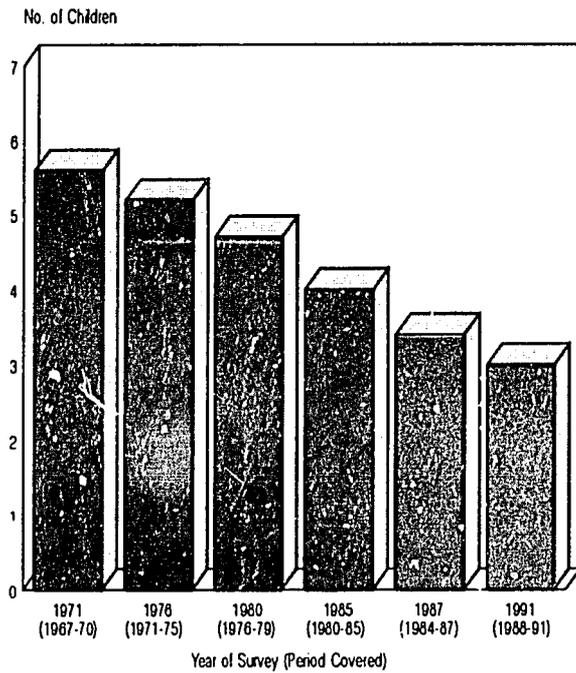
## Background

The Indonesia Demographic and Health Survey (IDHS) is a nationally representative survey of ever-married women age 15-49. All 27 provinces of Indonesia were covered by the survey. The IDHS was designed to provide information on levels and trends of fertility, infant and child mortality, family planning, and maternal and child health. The data are intended for use by program managers and policymakers to evaluate and improve family planning programs and maternal and child health programs.

The IDHS was carried out as a collaboration between the Central Bureau of Statistics, the National Family Planning Coordinating Board, and the Ministry of Health. Financial and technical assistance were provided by Macro International Inc. under a contract with the United States Agency for International Development (USAID). Additional funding was received from the Government of Indonesia, UNFPA, and USAID/Jakarta.

Between May and July 1991, more than 27,000 households were visited, and 22,909 women were interviewed. Information on children born to these women was also collected. For the 14,355 children born in the five years preceding the survey, detailed questions were asked about their vaccination status, breastfeeding and food supplementation, and illnesses. The IDHS is the second survey implemented in Indonesia under the DHS program. The first survey, the National Indonesia Contraceptive Prevalence Survey (NICPS), was carried out in 1987.

**Figure 1**  
Trends in Fertility 1971-1991



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## Fertility

### Levels and Trends

- Fertility in Indonesia continues to decline. At current levels, Indonesian women will have an average of 3.0 children during their reproductive years. This figure represents a reduction of one child since 1985, and approximately 0.4 children since 1987. Since the early 1970s, Indonesia's fertility has declined by 46 percent.
- Fertility rates are lowest in Java-Bali (2.7 children per woman) and highest in Outer Java-Bali II (3.8 children per woman). In Java, West Java has the highest level of fertility (3.4 children per woman), while fertility rates are close to replacement level in Jakarta, Yogyakarta, East Java, and Bali.
- Fertility decreases as education increases. On average, women who have some primary education have one child more than women who have attended secondary school or higher.

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*At current levels, Indonesian women will have an average of 3.0 children during their reproductive years.*

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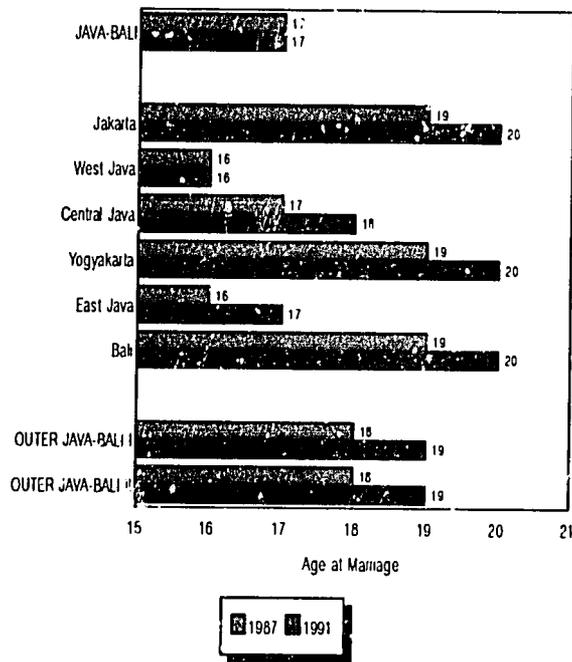
- Results from the survey indicate that if unwanted births were eliminated, the fertility rate in Indonesia would be around 2.5 births per woman or 15 percent lower than the current rate.

*Since the early 1970s, Indonesia's fertility has declined by 46 percent.*

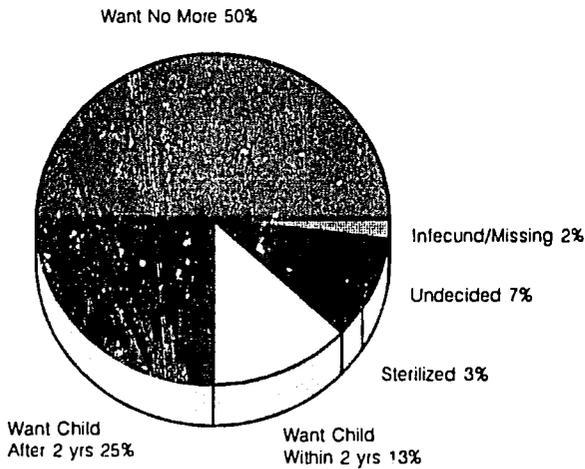
### Marriage

- Younger women in Indonesia are marrying later than did women in older age cohorts. The median age at marriage among women age 20-24 is 19.8 years, compared to 17.1 years among women age 40-44.
- There are large differences in age at marriage across regions and provinces. Within Java-Bali, the median age at first marriage ranges from 15.9 years in West Java to 20.2 years in Bali. Women in Java-Bali generally marry earliest followed by women in Outer Java-Bali I and Outer Java-Bali II. Compared to 1987, the age at marriage has increased in all the provinces in Java-Bali (except West Java), as well as in the Outer Islands.

**Figure 2**  
Median Age at Marriage by Region, 1987 and 1991



**Figure 3**  
**Fertility Preferences**  
 (Currently Married Women 15-49)



**Fertility Preferences**

- Half of currently married women in Indonesia do not want any more children. An additional 25 percent want to wait at least two years before having another child. Among women with three or more children, almost three-quarters want no more children or are sterilized.

*Three-quarters of married women would like either to postpone their next birth at least two years or to have no more children.*



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- The average desired family size among Indonesian women is 3.1 children. A two-child family is desired by about 34 percent of women while 22 percent say their ideal family size is three children. Almost 16 percent of women did not specify the number of children they desired, saying it was "up to God" or giving some other non-numeric response.

## Family Planning

### Knowledge and Use of Family Planning

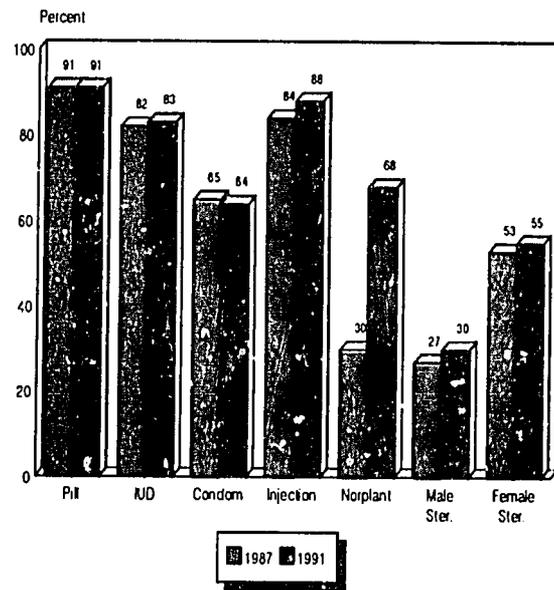
- Knowledge of contraceptive methods is practically universal in Indonesia; 94 percent of ever-married women know at least one modern method. Women's knowledge of most contraceptive methods has remained stable since 1987; however, there has been a large increase in knowledge of Norplant. In 1987, only 30 percent of married women had heard of this method while in 1991 this figure had increased to 68 percent.

*In 1987, only 30 percent of married women had heard of Norplant, while in 1991 this figure had increased to 68 percent.*

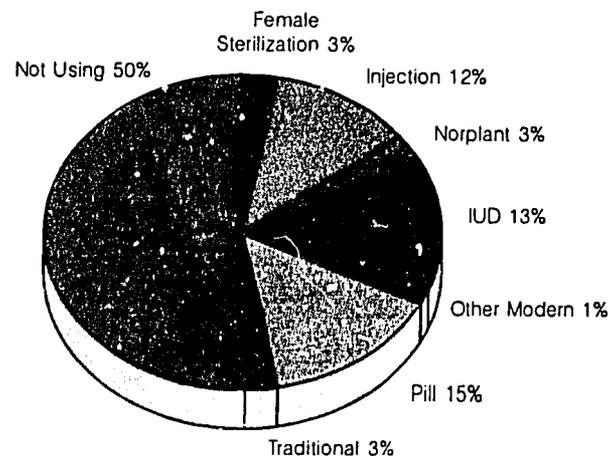
- Half of currently married Indonesia women are using contraception. The pill, IUD, and injection are the most commonly used methods, together accounting for over 80 percent of current use. The only other modern methods with significant proportions of users are Norplant and female sterilization.

*Half of currently married Indonesian women are using contraception.*

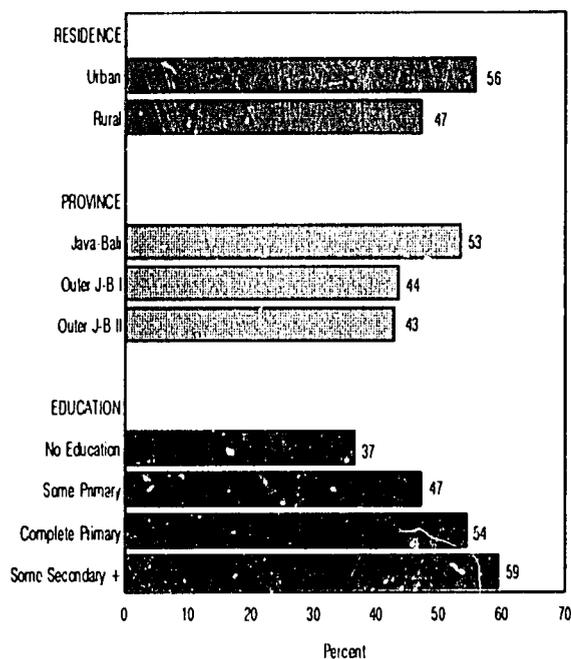
**Figure 4**  
Knowledge of Modern Contraceptive Methods,  
1987 and 1991  
(Currently Married Women 15-49)



**Figure 5**  
Current Use of Family Planning by Method  
(Currently Married Women 15-49)



**Figure 6**  
**Current Use of Family Planning by Selected Characteristics**  
**(Currently Married Women 15-49)**



- Contraceptive use is highest in Java-Bali (53 percent) and about 10 percentage points lower in Outer Java-Bali I and Outer Java-Bali II. Use of family planning is higher among urban than rural women. Slightly more than one-third of married women with no education use contraception compared to 59 percent of those with some secondary or higher education.
- One of the goals of the Indonesian family planning program is gradual privatization, by which increasing proportions of users pay for the services they obtain. This movement is popularly known by its logo, the *Blue Circle*. Results from the IDHS indicate that 34 percent of ever-married women have heard of *Blue Circle*. Of these, only one-third knew that it was a private family planning service, while 19 percent said that it concerned family planning but did not specifically mention that it was a private service.
- In 1987, approximately 64 percent of contraceptive users obtained their method free of charge from either a government or private source. By 1991, this figure had decreased to 38 percent.



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### Source of Family Planning Services

- Government sources, such as health centers and health posts, are the most important sources of family planning, supplying 76 percent of all users. Twenty-two percent of users receive family planning supplies or information from private sources, the most significant source being private midwives.

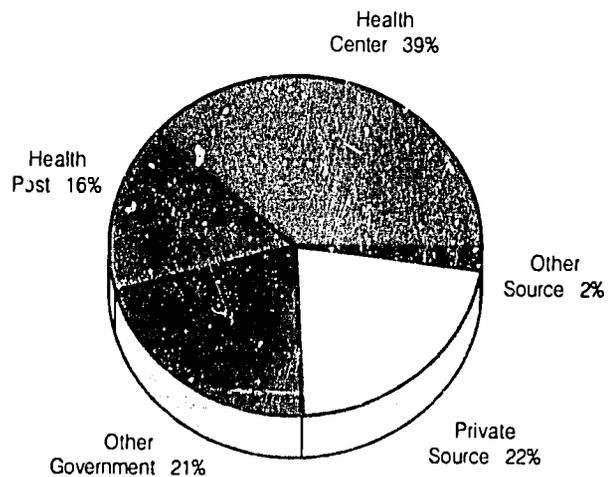
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*Government sources supply 76 percent of contraceptive users while private sources supply 22 percent.*

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- On average, women using modern contraceptive methods say that it takes 15 minutes to travel from their home to their source of family planning. There does not appear to be a significant difference in access to family planning between women who are using contraception and those who are not. Women who are not using contraception but know where to obtain it also said that it would take about 15 minutes to travel from their home to a source of family planning. These times do not differ between rural and urban areas.

**Figure 7**  
Sources of Supply among Current Users of Modern Contraceptive Methods



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### **Contraceptive Failure and Discontinuation**

- An improvement in the quality of contraceptive use is one of the goals of Indonesia's family planning program. One measure of the quality of use is the extent to which contraceptive users discontinue using and their reasons for doing so. Based on information for the five years preceding the IDHS, 27 percent of users discontinued using a method within 12 months of the beginning of use. Three percent became pregnant unintentionally, 6 percent stopped to become pregnant, 10 percent stopped using because they experienced side effects or health problems, and 9 percent stopped for other reasons.

### **Unmet Need for Family Planning**

- Six percent of married women in Indonesia have an unmet need for family planning to limit births. These are women who want no more children but are not using family planning. An additional six percent of women have an unmet need for family planning to space their births. These are women who want to wait two or more years before having their next birth but are not using family planning.

## Maternal and Child Health

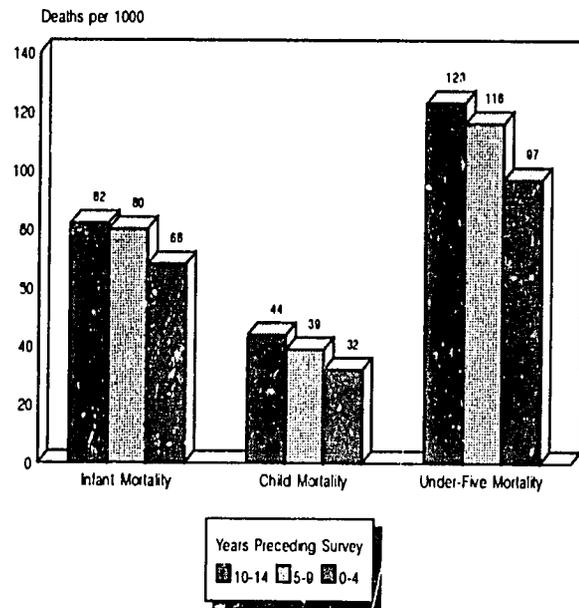
### Infant and Child Mortality

- Infant and child mortality in Indonesia have declined dramatically in the past two decades. Estimates suggest that infant mortality decreased by about half during the 20-year period from 1968 to 1988. Nevertheless, in the five years preceding the IDHS, approximately 68 of 1000 children died before reaching their first birthday and 97 of 1000 died before reaching age five.

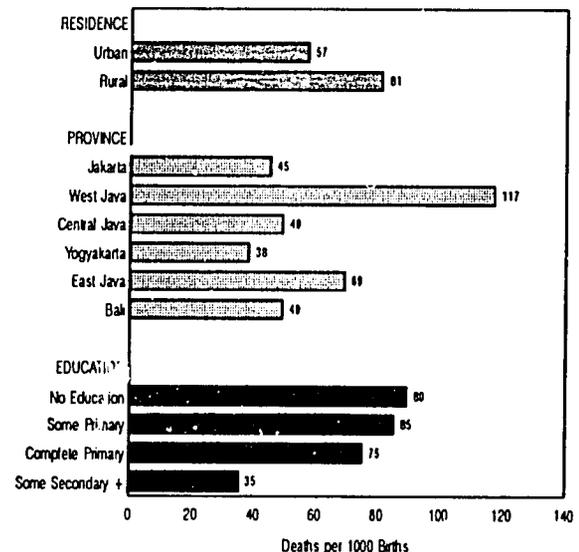
*Ninety-seven of every 1,000 children die before reaching age five.*

- Rates of infant and child mortality are higher in rural than urban areas and decrease with increasing education of mothers. In Java-Bali, infant and child mortality is highest in West Java and lowest in Yogyakarta.
- A child born less than 24 months after a younger sibling has more than double the risk of dying in the first year of life compared to a child born after a longer birth interval. Risks are also greater for children of birth order greater than 7 and those born to mothers less than 20 years of age.

**Figure 8**  
Trends in Infant and Child Mortality

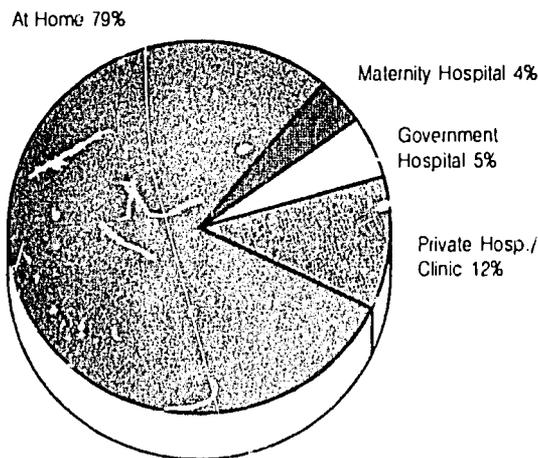


**Figure 9**  
Infant Mortality by Selected Characteristics



Note: Based on 10 years preceding survey.

**Figure 10**  
**Place of Delivery**  
 (Births in the Preceding Five Years)



**Antenatal Care and Assistance at Delivery**

- The level of antenatal care in Indonesia is relatively high. Eighty percent of children born in the five years preceding the IDHS had mothers who received some antenatal care. The most common providers of antenatal care are health centers, followed by private midwives and health posts. The proportion of children whose mothers did not have antenatal care is more than four times higher in rural areas (26 percent) than in urban areas (6 percent).

*Eighty percent of children born in the five years preceding the IDHS had mothers who received some antenatal care.*



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- In many developing countries, neonatal tetanus is a major cause of neonatal mortality. In order to protect children from neonatal tetanus, the Ministry of Health in Indonesia recommends that women receive two tetanus toxoid injections during their first pregnancy and a booster during each succeeding pregnancy. Overall, 43 percent of children born in the five years preceding the IDHS had mothers who received two or more injections of tetanus toxoid vaccine during the pregnancy. Another 14 percent received one dose.

- Eighty percent of Indonesian infants are delivered at home. About 12 percent are delivered at private hospitals or clinics, 5 percent at government hospitals, and 2 percent at maternity hospitals. Sixty-four percent of births are assisted by traditional birth attendants, 29 percent by midwives, and 2 percent by doctors.

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*Eighty percent of Indonesian infants are delivered at home.*

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### Infant Feeding

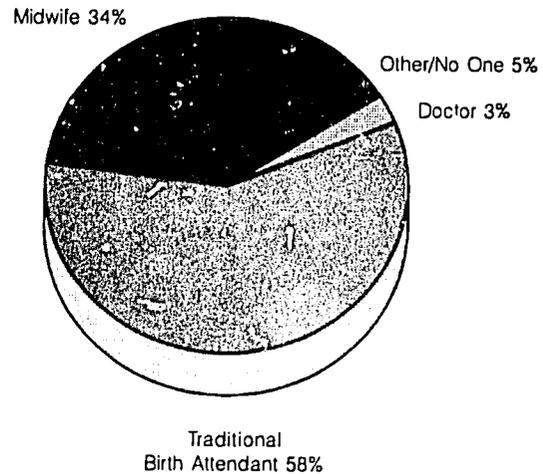
- Breastfeeding in Indonesia is nearly universal; 97 percent of all children are breastfed. On average, children are breastfed for a relatively long period of time but supplemental foods and liquids are introduced at an early age. The median duration of breastfeeding is 23 months but by the age of 2-3 months, half of children are already being given supplementary liquids or solids.

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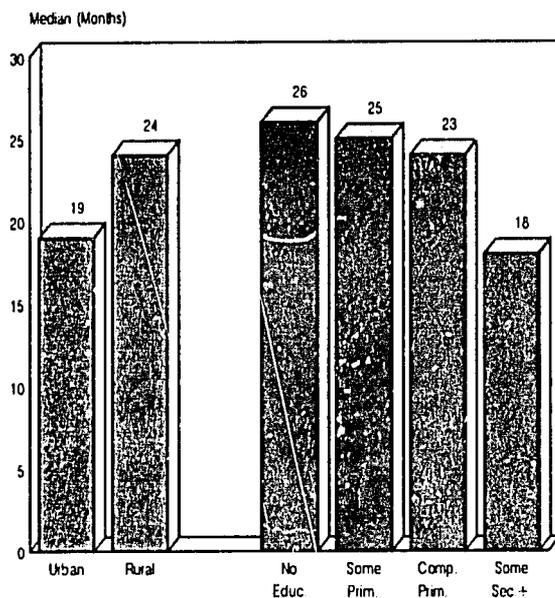
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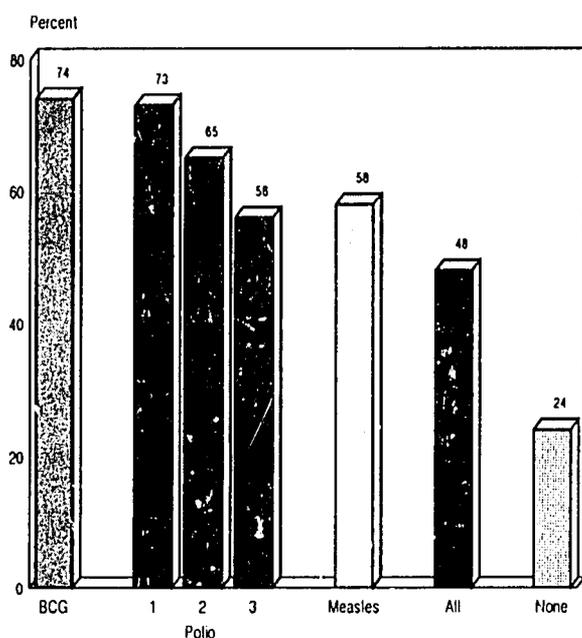
**Figure 11**  
Assistance at Delivery  
(Births in the Preceding Five Years)



**Figure 12**  
Median Duration of Breastfeeding



**Figure 13**  
Vaccination Coverage among Children Age 12-23 Months



- Children in rural areas are breastfed 5 months longer than children in rural areas. The median duration of breastfeeding is 18 months for children whose mothers have some secondary or higher education compared to 26 months among those whose mothers have no education.

**Immunization**

- Based on information obtained from vaccination cards and mothers' reports, 74 percent of children age 12-23 months have been vaccinated for tuberculosis (BCG vaccine) and 58 percent for measles. Seventy-three percent have received at least one dose of polio vaccine and one dose of DPT vaccine, but only 56 percent have received the full three-dose series.
- Overall, 48 percent of children age 12-23 months are fully immunized and 24 percent have received no immunizations at all. Vaccination coverage is higher in urban than rural areas and in Java-Bali compared to the Outer Islands. Forty-one percent of children whose mothers have no education have received no vaccinations compared to only 9 percent of those whose mothers have some secondary or higher education.

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*Overall, 48 percent of children age 12-23 months are fully immunized and 24 percent have received no immunizations at all.*

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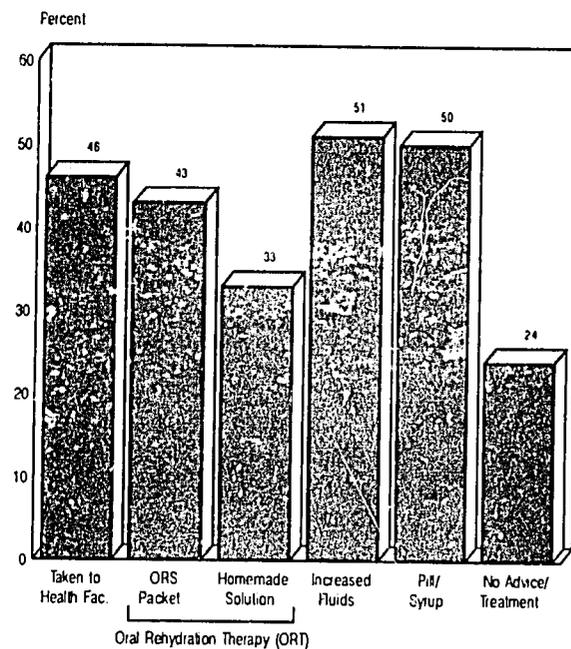
### Treatment of Childhood Diseases

- During the two weeks preceding the survey, 10 percent of children under age five had symptoms of acute lower respiratory infection (cough accompanied by rapid breathing). Sixty-five percent of the children were taken to a health facility.
- Over the same period, 11 percent of children suffered from diarrhea. Forty-three percent were treated with a solution prepared from ORS packets and 33 percent received some type of homemade oral rehydration fluid. In addition, 46 percent of children with diarrhea were taken to a health facility.
- Knowledge and use of ORS packets is widespread in Indonesia. Overall, 85 percent of packets and 59 percent have used them at some time.

*Eighty-five percent of mothers of young children know about ORS packets and 59 percent have used them.*

- During the two weeks preceding the survey, 27 percent of children suffered from fever; 7 percent had fever only (unaccompanied by cough, fast breathing, or diarrhea). Of those with fever only, half were taken to a health facility and 27 percent obtained treatment from a dispensary or drug store. Nine percent of children with fever were not taken for advice or treatment.

**Figure 14**  
Treatment of Diarrhea in the Two Weeks Preceding the Survey  
(Children under Five Years)



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## Conclusions

### Fertility and Family Planning

Fertility in Indonesia continues to decline in all regions of the country. Nevertheless, substantial differences between regions remain. At current rates, women in Java-Bali will have 2.7 children by the end of their reproductive years compared to 3.5 children in Outer Java-Bali I and 3.8 in Outer Java-Bali II. In spite of the rapid and significant decreases in fertility, there are indications that fertility could be even lower. Evidence from the IDHS survey suggests that if unwanted births were eliminated, women in all three regions would give birth, on average, to one-half child less than they do currently. Further, about 22 percent of recent births were wanted later than they occurred or were not wanted at all, and it is estimated that 13 percent of married women have an unmet need for family planning.

Knowledge of modern contraceptive methods is virtually universal in Indonesia and half of all married women are using family planning, primarily the pill, IUD, and injection. The level of contraceptive use is highest among married women with two or three children—almost 60 percent of these women use family planning.

The family planning program has made substantial gains toward the goal of self-sustainability, or privatization of family planning services. Government sources, such as health centers and health posts, are still supplying more than three-quarters of contraceptive users, but 22 percent of users receive family planning supplies or information from private sources. In addition, only 38 percent of users currently receive their method free, compared to almost two-thirds of users in 1987.

### Maternal and Child Health

Indonesia has made considerable progress in improving the survival chances of young children. Overall, infant mortality has declined dramatically in the past two decades. Yet, there are some groups of children with significantly higher infant mortality than others. Children of mothers with no education are 2.6 times more likely to die in the first year of life than children of mothers with some secondary or higher education. Those with rural mothers are 1.4 times more likely to die in the first year of life than those with urban mothers. In addition, children born after an interval of less than 24 months have an elevated risk of mortality.

A large majority of children have mothers who received antenatal care during their pregnancy and more than half received one or more tetanus toxoid injections during pregnancy. The maternal health program recommends that pregnant women should have at least 4 antenatal care visits during their pregnancy and the first visit should take place during the first trimester. Results from the IDHS suggest that this objective is close to being

achieved; on average, women have about 6 ante-natal care visits during their pregnancy and go for the first visit when they are 3.5 months pregnant. Eighty percent of Indonesian children are delivered at home. Children are most commonly delivered with the assistance of a traditional birth attendant.

Steps taken to increase child survival include the Expanded Programme on Immunization for six major childhood diseases (tuberculosis, diphtheria, pertussis, tetanus, polio, and measles). Based on information obtained from health cards and mothers' reports, almost half of all children age 12-23 months have been vaccinated against all six of these diseases. Among the 35 percent of children in this age group for whom vaccination information was obtained from a health card, 71 percent have been fully vaccinated.

Oral rehydration therapy (ORT) is promoted in Indonesia by the Diarrhea Control Program as an effective way to prevent and combat dehydration brought on by diarrheal disease. Knowledge and use of ORT is widespread; 85 percent of mothers of young children know about ORS packets and 59 percent have used them.



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## Fact Sheet

### 1990 Population Data Central Bureau of Statistics

Total population (millions)	179
Urban population (percent)	31
Annual natural increase (percent)	2.0
Population doubling time (years)	35
Crude birth rate (per 1,000 population)	30.2
Crude death rate (per 1,000 population)	10.2
Life expectancy at birth male (years)	57.1
Life expectancy at birth female (years)	63.0

### Indonesia Demographic and Health Survey 1991

#### Sample Population

Ever-married women age 15-49	22,909
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#### Background Characteristics of Women Interviewed

Percent urban	29.2
Percent with no education	19.1
Percent attended secondary or higher	20.0

#### Marriage and Other Fertility Determinants

Percent of women 15-49 currently married <sup>1</sup>	68.2
Percent of women 15-49 ever married <sup>1</sup>	74.1
Median age at first marriage among women age 25-49	17.7
Median duration of breastfeeding (in months) <sup>2</sup>	23.3
Median duration of postpartum amenorrhea (in months) <sup>2</sup>	7.3
Median duration of postpartum abstinence (in months) <sup>2</sup>	2.6

#### Fertility

Total fertility rate <sup>3</sup>	3.0
Mean number of children ever born to women age 45-49 <sup>1</sup>	5.1

#### Desire for Children

Percent of currently married women who:	
Want no more children	50.4
Want to delay their next birth at least 2 years	25.1
Mean ideal number of children among women 15-49 <sup>4</sup>	3.1
Percent of women giving a non-numeric response to ideal family size	
to ideal family size	15.6
Percent of births in the last 5 years which were:	
Unwanted	6.5
Mistimed	15.8

#### Knowledge and Use of Family Planning

Percent of currently married women:	
Knowing any method	94.6
Knowing a modern method	94.4
Knowing a modern method and knowing a source for the method	92.9
Had ever used any method	69.3
Currently using any method	49.7

#### Percent of currently married women currently using:

Pill	14.8
IUD	13.3
Injection	11.7
Norplant	3.1
Condom	0.8
Female sterilization	2.7
Male sterilization	0.6
Periodic abstinence	1.1
Withdrawal	0.7
Other traditional	0.9

#### Mortality and Health

Infant mortality rate <sup>5</sup>	67.8
Under-five mortality rate <sup>5</sup>	97.4
Percent of births <sup>6</sup> whose mothers:	
Received antenatal care	79.9
Received 2 or more tetanus toxoid injections	42.6
Percent of births <sup>6</sup> whose mothers were assisted at delivery by:	
Doctor	2.4
Midwife	29.3
Traditional birth attendant	63.7
Percent of children 0-1 month who are breastfeeding	98.6
Percent of children 4-5 months who are breastfeeding	96.5
Percent of children 10-11 months who are breastfeeding	90.7
Percent of children 12-23 months who received: <sup>7</sup>	
BCG	73.6
DPT (three doses)	55.8
Polio (three doses)	56.1
Measles	57.5
All vaccinations	43.3
Percent of children under 5 years <sup>8</sup> who:	
Had diarrhea in the 2 weeks preceding the survey	11.1
Had a cough accompanied by rapid breathing in the 2 weeks preceding the survey	9.8
Had a fever in the 2 weeks preceding the survey	26.9

<sup>1</sup> Based on all women

<sup>2</sup> Current status estimate based on births during the 36 months preceding the survey

<sup>3</sup> Based on births to women 15-49 years during the period 0-2 years preceding the survey

<sup>4</sup> Based on ever-married women. Excludes women who gave a non-numeric response to ideal family size (16 percent of women 15-49)

<sup>5</sup> Rates are for the period 0-5 years preceding the survey (mid-1985 to mid-1991)

<sup>6</sup> Figure includes births in the period 1-59 months preceding the survey

<sup>7</sup> Based on information from vaccination cards and mothers' reports

<sup>8</sup> Figures include children born in the period 1-59 months preceding the survey