



EAST-WEST CENTER  
Building an Asia Pacific Community

40<sup>th</sup> Anniversary  
1960-2000

# ASIA - PACIFIC POPULATION & POLICY

## New Survey Measures Fertility and Family Planning Trends in India

*Asia-Pacific Population & Policy summarizes research on population and reproductive health for policymakers and others concerned with the Asia-Pacific region.*

*This publication was made possible through support from The David and Lucile Packard Foundation. The opinions expressed do not necessarily reflect the views of the East-West Center or of its supporters.*

Writers:

Sidney B. Westley  
Robert D. Retherford

Series Editor:

Sidney B. Westley

Editorial Committee:

Tim Brown  
Minja Kim Choe  
Philip Estermann  
Robert D. Retherford

Number 55  
October 2000

ISSN 0891-6683

Correspondence address:

East-West Center, Research Program  
Population and Health Studies  
1601 East-West Road  
Honolulu, HI 96848-1601, USA  
Telephone: (808) 944-7482  
Fax: (808) 944-7490  
E-mail: [poppubs@EastWestCenter.org](mailto:poppubs@EastWestCenter.org)  
Internet site: [www.EastWestCenter.org](http://www.EastWestCenter.org)

In 1952, India was the first country in the world to introduce a national family planning program. Since then, program objectives and strategies have been revised several times. Most recently, in 1996, India's National Family Welfare Programme was renamed the Reproductive and Child Health Programme and was expanded to meet the broader health needs of women and children. In 2000, the Indian government adapted a new National Population Policy with a medium-term objective of bringing total fertility down to replacement level by 2010.

India's new approach to family planning emphasizes promoting contraceptive use among eligible couples, providing a choice of contraceptive methods (including condoms, pills, IUDs, and male and female sterilization), and ensuring high-quality care. An important goal is to improve the health of women and their children by encouraging spacing between births. Overall, the new policy shifts the emphasis from achieving demographic targets toward meeting the reproductive health needs of clients.

The second National Family Health Survey (NFHS-2) was conducted in 1998-99 to provide national and state-level information on fertility, mortality, family planning, and important aspects of nutrition, health, and health care. A comparison with results from the first National Family Health Survey (NFHS-1), conducted in 1992-93, provides information on trends in

many of these areas. One objective is to help policymakers and program managers evaluate and improve reproductive health services.

The International Institute for Population Sciences (IIPS) in Mumbai conducted NFHS-2 with field support from five Population Research Centres and eight private survey organizations. Two US-based organizations, ORC Macro and the East-West Center, provided technical assistance. The United States Agency for International Development (USAID) provided financial support, with additional funding from the United Nations Children's Fund (UNICEF).

Between November 1998 and December 1999, NFHS-2 field staff visited 91,196 households in 25 states (field work in Tripura was completed later). They interviewed 89,199 ever-married women age 15-49 and collected information on these women and on 32,393 of their children born in the previous three years. The sample covers 99 percent of India's population. This issue of *Asia-Pacific Population & Policy* presents information from the survey on fertility trends and preferences and knowledge and use of family planning.

### BACKGROUND CHARACTERISTICS

The age distribution of the NFHS-2 sample households shows how important India's family planning services will be over the next decade. In 1998-99,

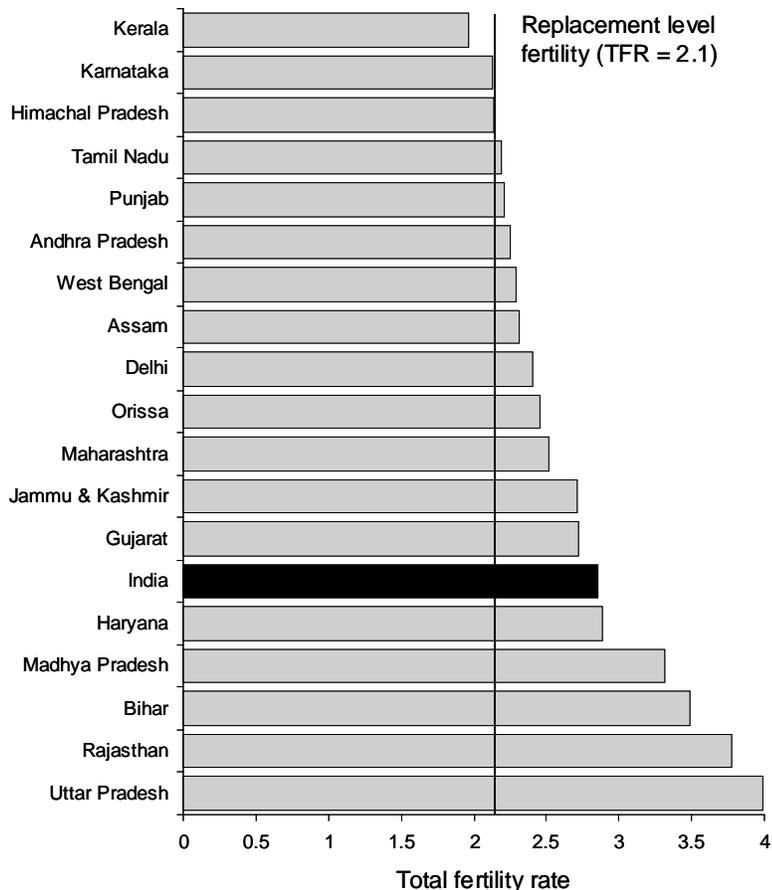


Figure 1 Total fertility rates for ever-married women age 15–49 in the 18 most populous states of India, NFHS-2, 1996–98

35 percent of the population was between ages 5 and 20, a very high proportion by international standards. These will be the young adults who must be reached if India is to achieve replacement-level fertility by 2010.

Nearly all women in India marry, and most marry at an early age: 34 percent of women age 15–19 are already married. Although very early marriage (below age 15) is increasingly rare, one-half (50 percent) of all women who are currently age 20–24 were married before they reached the legal minimum age of 18.

One-half (51 percent) of women and girls age six and above are literate, an increase of 8 percentage points from the time of NFHS-1. The proportion of girls age 6–17 attending school varies from 51 percent in Bihar and 56 percent in Rajasthan to more than 90 percent in Himachal Pradesh and Kerala.

## FERTILITY

A major goal of NFHS-2 was to provide information on fertility levels and trends. Estimates are based on complete birth histories collected from ever-married women age 15–49. Results are used to calculate total fertility rates (TFRs)—the number of children a woman would bear throughout her reproductive years at current age-specific fertility rates.

**Fertility rates.** Fertility has declined considerably since NFHS-1. At current age-specific fertility rates prevailing at the time of NFHS-2, women would have an average of 2.9 children each throughout their childbearing years. This represents a decrease of 16 percent from the TFR of 3.4 estimated in NFHS-1, but it is still well above the replacement fertility level of about 2.1.

Fertility varies widely among India's regions and states (Figure 1). Six states have achieved or nearly achieved replacement-level fertility—Goa, Kerala, Karnataka, Himachal Pradesh, Tamil Nadu, and Punjab. At the other end of the spectrum, seven states have fertility levels well above the national average—Uttar Pradesh, Rajasthan, Bihar, Madhya Pradesh, and the small north-eastern states of Manipur, Meghalaya, and Nagaland.

Efforts to encourage the trend toward lower fertility might usefully focus on groups within the population that have higher fertility than average. In India, rural women and women from scheduled tribes and scheduled castes<sup>1</sup> have somewhat higher fertility than other women. Fertility is particularly high among illiterate women and poor women.

Another striking feature is the high level of childbearing among young women. Women age 15–19 account for almost one-fifth (19 percent) of total fertility, down very little in the years since NFHS-1.

**Fertility preferences.** The appropriate design of family planning programs depends, to a large extent, on women's fertility preferences. Women may have large families because they want many children, or they may prefer small families but, for a variety of reasons, have more children than they actually want.

Many indicators suggest that women in India would prefer to have small families. About two-thirds of women either say that they want no more children (28 percent) or report that they cannot get pregnant or that they or their husbands have been sterilized (40 percent).

<sup>1</sup>Scheduled castes (SC) and scheduled tribes (ST) are castes and tribes identified by the Government of India as socially and economically disadvantaged and in need of special protection from social injustice and exploitation.

After women have two children, the desire for more drops sharply: 76 percent of women with one child want another, compared with only 23 percent of women with two children.

Nearly three-fourths of all currently married women report that two (47 percent) or three (25 percent) children would be the ideal family size. Even women with larger families consider two children ideal—41 percent of women who already have three children and 24 percent of women with four or more children consider two the ideal family size.

From information on ideal number of children, it is possible to calculate a total wanted fertility rate that can be compared with the actual TFR. A birth is considered unwanted if, at the time of conception, the mother already had her ideal or more than her ideal number of living children. Using this information, the TFR is recomputed omitting all unwanted births. Calculated in this way, the total wanted fertility rate for India as a whole is 2.13, which is 25 percent lower than the total fertility rate of 2.85. This means that if all unwanted births could be avoided, the TFR would drop to replacement level.

Among currently married women who have one living child, nearly one-half (44 percent) want to wait at least two years before having another birth. Even among women who have no living children, 12 percent want to wait at least two years before having a birth. This widely expressed desire to delay or space births suggests a large potential demand for temporary contraceptives.

## FAMILY PLANNING

**Knowledge.** Nearly all currently married women (99 percent) know at least one modern contraceptive method. Women are most likely to be familiar with female sterilization (98 percent), followed

by male sterilization (89 percent), the pill (80 percent), IUDs, and condoms (both 71 percent).

**Current use.** Nearly one-half (48 percent) of currently married women are using contraception, up from 41 percent at the time of NFHS-1 (Table 1). Forty-three percent are using a modern method, up from 36 percent. Three-fourths (75 percent) of all women who use any contraception are sterilized, or their husbands are sterilized. Despite government efforts to promote spacing methods, the share of female sterilization in the overall method mix has gone up since NFHS-1. The share of male sterilization has gone down slightly, and the share of modern spacing methods has remained at very low levels.

Among India's most populous states, modern contraceptive use is lowest in Uttar Pradesh and Bihar (both 22 percent of currently married women age 15–49), followed by Assam (27 percent) and Rajasthan (38 percent). Current use of modern temporary methods is particularly low (6 percent or less) in Bihar, Andhra Pradesh, Tamil Nadu, Karnataka, Orissa, Kerala, Madhya Pradesh, Uttar Pradesh, and Rajasthan. Interestingly, Tamil Nadu and Karnataka have achieved replacement or near-replacement fertility despite such low use of temporary methods.

Educated women are more likely to use contraception than are illiterate women, but even among women who have completed secondary or higher education, less than one-half (47 percent) are currently using any modern method of contraception. Among illiterate women, the proportion is 39 percent. Educated women are more likely to use modern spacing methods than are illiterate women, but the proportions are still very low. Three percent of women who have completed secondary or higher education use the pill, 6 percent use IUDs, and 11 percent use condoms.

Table 1 Current modern contraceptive use among currently married women age 15–49

| Method                 | % currently using |        |
|------------------------|-------------------|--------|
|                        | NFHS-1            | NFHS-2 |
| Any modern method      | 36.5              | 42.8   |
| Female sterilization   | 27.4              | 34.2   |
| Male sterilization     | 3.5               | 1.9    |
| Pill                   | 1.2               | 2.1    |
| IUD                    | 1.9               | 1.6    |
| Condom                 | 2.4               | 3.1    |
| Any traditional method | 4.3               | 5.0    |
| Total                  | 40.8              | 47.8   |

The low use of spacing methods is reflected in early childbearing and short birth intervals. Among currently married women age 20–49, the median age at first birth is 19.6 years. This means that more than one-half gave birth when they were less than 20 years old. More than one-fourth (28 percent) of all births reported in NFHS-2 occurred less than 24 months after a previous birth.

**Unmet need.** Currently married women who are not using any method of contraception but who do not want any more children or want to wait at least two years before having another child are defined as having an “unmet need” for family planning. This definition fits 16 percent of currently married women in India. Half of these women (8 percent) have an unmet need for spacing because they want to delay their next birth. The other half (8 percent) have an unmet need for limiting because they want to stop childbearing.

Unmet need is highest (at 27 percent) among women below age 20. Nearly all (94 percent) of this unmet need is for spacing. Unmet need is also quite high (24 percent) among women age 20–24, and three-fourths (75 percent) of this unmet need is for spacing. These young women who wish to delay



childbearing or space births would be the primary beneficiaries of efforts to expand the use of temporary contraceptive methods.

Among India's major states, unmet need for family planning ranges from 7 percent in Punjab to 25 percent in Uttar Pradesh and Bihar. Although unmet need declined in most states between NFHS-1 and NFHS-2, there is scope for considerable improvement in the coverage and quality of services to meet women's need for family planning, especially in Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, and Orissa.

### Sources of family planning services.

The Indian government provides family planning methods and services through Primary Health Centers and sub-centers in rural areas and through such facilities as government hospitals and family welfare centers in towns and cities. Private hospitals and clinics and nongovernmental organizations (NGOs) also provide family planning services, and pills and condoms are available in shops.

When women currently using modern methods were asked where they obtained family planning services, 76 percent mentioned government sources, 17 percent mentioned private medical services, 5 percent mentioned shops or other sources, and 1 percent mentioned NGOs. For the small group of women currently using a modern temporary method, obtaining a regular supply does not appear to be a problem.

Although home visits are an important feature of the Reproductive and Child Health Programme, only 13 percent of currently married women age 15–49 received a home visit from a health worker during the 12 months before NFHS-2. The major focus of home visits appears to be immunization and treatment of health problems. Most women who were visited at home by a health worker were satisfied with the service they received, yet only 15 percent

of these women reported receiving family planning services during a home visit.

Women who obtain family planning from a health provider often do not receive all the information they need to choose the most appropriate method. Only 22 percent of these women were told about the possible side effects of the method they chose, and even fewer (20 percent) were told about alternative methods.

Overall, less than one-half (40 percent) of women interviewed in NFHS-2 have ever discussed any method of contraception with a health worker. Female sterilization is by far the most frequently discussed method (32 percent), followed by pills (10 percent), IUDs (9 percent), condoms (7 percent), and male sterilization (4 percent). Clearly, health workers are not discussing family planning as widely as they might in order to increase contraceptive use and to help women make informed choices about methods.

---

## POLICY IMPLICATIONS

NFHS-2 findings on actual and wanted fertility levels have important policy implications. In communities where wanted fertility is particularly high, family planning programs need to address the attitudes of women and their husbands toward family size. Among India's most populous states, wanted fertility is highest in Uttar Pradesh, Bihar, and Rajasthan.

In communities where wanted fertility is much lower than actual fertility, programs need to look at the availability and quality of family planning services and to identify the reasons why women are having more children than they would prefer. The difference between wanted and actual fertility is particularly high in Uttar Pradesh, Rajasthan, Jammu and Kashmir, Madhya Pradesh, and Bihar.

These findings underscore the need for appropriate state-specific strategies to improve the coverage and quality of family planning services. Both visiting and clinic-based health workers appear to be missing important opportunities to discuss family planning with their clients.

From the information provided in NFHS-2, a picture emerges of women marrying early, having their first child soon after marriage, having a second and possibly a third child in close succession, and then being sterilized—all by the time they reach their mid-20s. The median age for female sterilization is 26 years, one year earlier than at the time of NFHS-1.

Female sterilization remains by far the most widely used contraceptive method in India—less than 7 percent of all currently married women of reproductive age use any modern temporary method. A few states have brought their TFRs down to replacement level based almost entirely on female sterilization, yet the persistence of early childbearing and close spacing of births underlines the importance of promoting temporary methods.

Although birth spacing is a prominent feature of India's Reproductive and Child Health Programme, unmet need for contraception is particularly high among young women who would be the primary clients for spacing methods. Studies in India and elsewhere have shown that health and mortality risks increase—both for women and for their children—when women give birth before they reach age 20 or within 24 months of a previous birth. Family planning programs providing spacing methods to these young women could make a significant impact on maternal and child health as well as helping to reduce fertility.

