



Adolescent Reproductive Health in India

Many adolescents in India face reproductive and other health risks. Poor nutrition and lack of information about proper diets increase the risk of iron-deficiency anemia for adolescent girls. Young women and men commonly have reproductive tract infections (RTIs) and sexually transmitted infections (STIs), but do not regularly seek treatment despite concerns about how these infections may affect their fertility.

India also has one of the highest rates of early marriage and childbearing, and a very high rate of iron-deficiency anemia. The prevalence of early marriage in India as elsewhere poses serious health problems for girls, including a significant increase of maternal or infant mortality and morbidities during childbirth.

- The median age of marriage among women, ages 20 to 24, in India is 16 years.
- The median age at marriage for girls in the Marathwada region of Maharashtra state, which includes Aurangabad, is 14.5 years.
- In rural India, fully 40 percent of girls, ages 15 to 19, are married, compared to only 8 percent of boys the same age.
- Among women in their reproductive years (ages 20 to 49), the median age at which they first gave birth is 19.
- Nearly half of married girls, ages 15 to 19, have had a least one child.
- India has the world's highest prevalence of iron-deficiency anemia among women, with 60 percent to 70 percent of adolescent girls being anemic.

Underlying each of these health concerns are gender and social norms that constrain young people's – especially young women's – access to reproductive health information and services.

Research Findings

In three years or less, several interventions from the *Adolescent Reproductive Health Program in India* showed significant improvements in the rates of girls marrying young, girls' health and nutrition, and prevalence of reproductive tract and sexually transmitted infections among youth.

Rates of Early Marriage Reduced

- The age at marriage of girls who participated in the life-skills program implemented by the Institute of Health Management, Pachod (IHMP) increased by one year, from 16 to 17.
- The proportion of girls who married young decreased from 80.7 percent in 1997 to 61.8 percent in 2001 in IHMP intervention areas. No change occurred in the control area.

Girls' Nutrition Improved

- The percent of girls who ate three or more meals per day increased from 2.9 percent to 27.7 percent in IHMP's study site. The control site saw a decline in the percent of girls who consumed three or more meals per day.
- Blood testing showed that hemoglobin levels for girls in the IHMP study site increased from 5.8 to 9.5 grams per deciliter (g/dl) for severely anemic girls, and 8.9 to 11.2 g/dl for moderately anemic girls. Healthy hemoglobin levels for girls vary by their size and age, but usually range from 12 to 18 g/dl.

Prevalence of Reproductive Tract Infections Improved

- In a Christian Medical College (CMC) intervention, young married women accepted trained community health aides to deliver RTI/STI treatment. Health aides, who examined symptomatic women in their own homes during regular biweekly visits, correctly diagnosed and treated more women than female doctors, who offered services at the clinic once each six weeks.
- Women's knowledge of three or more symptoms of reproductive tract infections increased in both intervention areas (where health aides were present and where a female doctor was present), but the health aide intervention saw a 6 percent higher increase in knowledge.
- Overall prevalence of RTIs between 1997 and 2006 was cut by half in CMC's intervention communities, from 46 percent to 23 percent in the area served by health aides and from 32 percent to 13 percent in the area served by female doctors.

About the Adolescent Reproductive Health Program in India

The International Center for Research on Women (ICRW) collaborated with partners in India on multisite intervention studies to improve youth reproductive health in India. The partners included Christian Medical College, Vellore (CMC); the Foundation for Research in Health Systems (FRHS); the Institute of Health Management, Pachod (IHMP); KEM Hospital Research Centre; and Swaasthya.

This program was conducted in two phases. Phase I (1996-1999) comprised formative research that documented key concerns and constraints about adolescent reproductive and sexual health. It included a study by the Tata Institute of Social Sciences, Mumbai, which did not participate in Phase II; IHMP did not participate in Phase I. In Phase II (2001-2006), these findings were used to design and implement intervention research programs to test alternative models to improve youth reproductive and sexual health.

The research program was supported by the Rockefeller Foundation. The full research findings are in the report *Improving the Reproductive Health of Married and Unmarried Youth in India* available at www.icrw.org.