Many reproductive and sexual health outcomes in India continue to improve. The indicators are positive, but there is still work to be done.

- India is on track to lower the total fertility rate from approximately 2.5% in 2009 to 2.1% by 2017.
- HIV prevalence at the national level has declined from 0.41% in 2000 to 0.31% in 2009.
- Infant mortality is declining from a current rate of 4.7% to a projected rate of 3.8% by 2015 and 3.4% by 2017.

Women and their families still suffer unacceptably high rates of unintended pregnancies and exposure to HIV and sexually transmitted infections.

- India’s nine states with the highest poverty levels are responsible for 59% of births, 70% of infant deaths, 75% of children under five deaths, and 62% of maternal deaths.
- New HIV infections have increased in poor states within the last few years.
- Sexually transmitted infections in at least four poor states in India increased five to six percent between 2001 and 2006.
- Approximately 30 million sexually transmitted infections are reported annually.
- Seventy-eight percent of pregnancies in India are unplanned, contributing to 6.7 million abortions annually.
- Unsafe abortions, sexually transmitted infections, and risky deliveries are leading causes of maternal mortality and morbidity, including infertility, in India.

Young people, particularly young women, are some of the most vulnerable when it comes to reproductive health.

Almost one-fourth of teenage girls are pregnant or mothers by age 18. Only 7% of young women and 27% of young men who had premarital sex had ever used condoms.

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<th>Age (years)</th>
<th>Percentage of girls who are pregnant or mothers by age.</th>
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<td>15</td>
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Sex workers play a critical role in the spread of disease. With nearly 1.3 million people in India working in the sex trade, control of sexually transmitted infections could have a significant impact on decreasing the spread of HIV.

Conditions associated with poor maternal health—including access to reproductive health options, deficient nutrition, and low-quality obstetric and newborn care—are attributable for at least one in five diseases among children under five years old.

Unmet need for family planning is high at 20%. Among women who do not use contraception, at least 64% do not do so because of side effects, opposition from spouses, inconvenience, and/or cost.

The two products that exist to simultaneously prevent pregnancy and HIV or sexually transmitted infections have not been sufficient to address women’s reproductive health needs.

- Male condoms are not always used consistently, even though they are inexpensive and widely available. Issues of trust and power make it difficult for women to negotiate condom use.
- Even though female condoms effectively protect against pregnancy and sexually transmitted infections, low awareness, lack of availability, and cost have inhibited widespread use.

When women have the ability to space or limit births, children’s survival increases and maternal mortality decreases. Children born three to five years after a previous birth are more likely to survive at all stages of infancy and childhood through age five than children born less than three years following a previous birth.

Why multipurpose prevention technologies

Multipurpose prevention technologies (MPTs) that simultaneously prevent pregnancy and sexually transmitted infections can help reduce the significant unmet need for family planning and further reduce HIV and sexually transmitted infections.

Products, including microbicide gels and vaginal rings, that address more than one reproductive and sexual health need could greatly improve convenience and reduce costs over products intended for only one health need. Family planning solutions that include MPTs can help India achieve and maintain its national goals to bring down the total fertility rate and significantly reduce sexually transmitted infections and new HIV infections.

A combination of new technologies, such as MPTs, and increased use of existing contraceptives will move us closer to achieving the Millennium Development Goals calling for universal access to reproductive health, including family planning, and stopping the spread of HIV.
Products and technologies

Multipurpose prevention technologies (MPTs) are some of the most innovative health products under development aimed at simultaneously preventing unintended pregnancy and sexually transmitted infections, including HIV. Currently, there are nearly two dozen MPTs in various stages of development.

Promising MPTs being developed internationally include a new single-size diaphragm and easy-to-use vaginal rings to prevent pregnancy and sexually transmitted infections.

Innovative products currently under development in India such as creams and vaginal tablets could lead to marked declines in HIV and sexually transmitted infections. MPTs made from natural and synthetic materials and food preservatives are currently in early stages of development in India.

Innovative products that empower women, such as microbicides, could lead to marked declines in HIV and sexually transmitted infections. Advances in microbicide technology could enable women to protect themselves against pregnancy and disease. For example, a recent clinical trial successfully demonstrated that a vaginal gel microbicide can effectively prevent infection by both HIV and the genital herpes virus (herpes simplex 2).

Call to action

While scientifically challenging, the development of safe and effective multipurpose prevention technologies (MPTs) is feasible. Scientific groups are currently working to advance technologies that simultaneously prevent unintended pregnancy and disease through combinations of drugs, devices, and vaccines. These approaches represent promising development pathways for both near-term and long-term solutions for women’s reproductive health.

Now is the time to prioritize the development of MPTs. With increased convergence among India’s sexual and reproductive health, HIV, and other health related programs, the environment for collaboration has never been better.

In addition to encouraging more frequent and widespread use of existing technologies, funding the development of promising MPTs can provide women with a range of family planning options while reducing sexually transmitted infections and HIV.

India is in a good position to develop MPTs due to its strong research and development capacity, vibrant pharmaceutical industry, range of biodiversity and traditional medical systems, and large population with potential need.

The development of multipurpose prevention technologies may enable India to come closer to meeting its national goals of increasing child survival, reducing maternal mortality, and improving women’s health. We must work together through increased national and international collaboration to accelerate the development and eventual use of products that simultaneously prevent pregnancy and disease.

To learn more about the Initiative for Multipurpose Prevention Technologies, visit www.cami-health.org or contact cami@cami-health.org.

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