strongly suggests that other poor countries in Africa can achieve similar rapid change in reproductive behavior if they invest in family planning programs.

Results from these case studies support the conclusion that family planning programs affect desired family size. Because it is impossible to rule out a role for unobserved confounding factors, however, results from such natural experiments are inconclusive.

A Puzzle: The Matlab Experiment
One of the best known and most influential controlled family planning experiments began in 1977 in the Matlab district of Bangladesh. Matlab’s population of 173,000 was divided into roughly equal experimental and control areas. In the experimental half, the quality of family planning services (including home visits, access to an array of methods and follow-up care) was greatly improved. In the control half, no changes were made in the standard services provided by the national program. Improved services provided large and immediate results.20 Contraceptive use in the experimental area jumped from 5% to 33% in the first 18 months and remained 25% higher than in the control area until the 1990s, when service improvements in the control area (and nationwide) narrowed the gap. Thus, fertility declined in the experimental area, and the difference between the areas of 1.5 births per woman was maintained until approximately 20 years ago. The Matlab experiment demonstrated that family planning programs can succeed even in very traditional societies. The success of this intervention led the Bangladesh government to apply the lessons of the experiment to its national program.

To understand the factors that drove this fertility decline, Koenig et al.30 examined the trend in preferences during the first seven years of the experiment (1977–1984). Unfortunately, this assessment was hampered by a lack of consistent measures of fertility preferences over time. Nevertheless, the authors concluded that family size preference in Matlab had declined by 1984, but that the decline had been no larger in the experimental than in the control area. This finding implies that the observed uptake in contraceptive use and the corresponding decline in fertility in the intervention area resulted mostly from a rise in fulfillment of latent or unsatisfied demand for contraceptives.8,30

How can this result from the Matlab experiment be reconciled with earlier evidence of family planning programs’ impact on family size preferences? The answer to this puzzle appears to be the information, education and communication program that has been implemented throughout Bangladesh since the 1970s. The program’s emphasis on the benefits of smaller families and contraception most likely reached and affected the control and intervention areas equally. This media effort has been extensive and involves political and religious leaders. As Khuda and colleagues31 have noted, Radio Bangladesh has assigned more than 90 minutes a day of its national and regional programming to population and family planning issues, while television has allocated two hours a week. Moreover,

![Figure 2. Total fertility rate for pairs of countries](image-url)

![Figure 3. Wanted total fertility rate for pairs of countries](image-url)