

# IS EDUCATION THE BEST CONTRACEPTIVE?

The World Bank calls women’s education the “single most influential investment that can be made in the developing world.” Many governments now support women’s education not only to foster economic growth, but also to promote smaller families, increase modern contraceptive use, and improve child health. Educating women is an important end in and of itself. But is education the best short-term strategy for advancing women’s reproductive choice in low-resource settings?

The United Nations, the U.S. National Academy of Sciences, the Population Council, and others have examined the linkages between education and childbearing to provide a greater understanding of these issues. This policy brief highlights key findings from their investigations. The evidence suggests that a number of factors influence childbearing decisions, and that both short-term and long-term policy options need to be considered to improve women’s reproductive health.

## The links between education and childbearing

**Women with more schooling tend to have smaller, healthier families.** Throughout the world, more education is associated with smaller family size. In a number of less developed countries, women with no education have about twice the number of children as women with ten or more years of school.<sup>1</sup> Women with more education usually make a later, healthier transition into adulthood: They have their first sexual experience later, marry later, want smaller families, and are more likely to use contraception than their less educated counterparts.

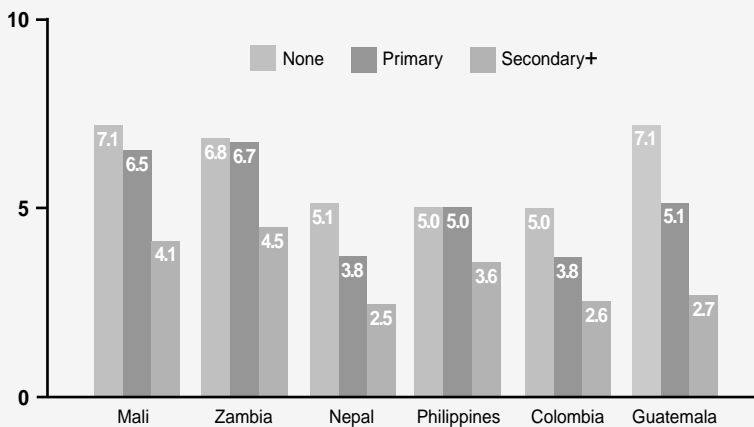
## The relationship between women’s education and family size varies across settings.

The fertility rates of women with similar levels of education differ from country to country (see Figure 1). The most highly educated women in some African countries, for example, have larger families than do women in other regions who have only a few years of schooling. Additionally, past research has demonstrated that modest levels of education are not always associated with smaller family size. A 1995 study found that in some less developed countries, women with a few years of schooling had about the same number, or more children, than did women with no education.<sup>2</sup> This study concluded that in countries that are more developed and have higher female literacy levels, more education is consistently associated with lower fertility. In the poorest countries, however, a small amount of education may have little effect on fertility levels.

**Steep fertility declines often occur among women who have had seven or more years of school.** In many of the poorest countries, seven years of education is the “threshold” level for a fertility decline of 20 percent or more. Research indicates that the less developed the country, the more years of education are required to affect fertility levels and related indicators such as age at marriage and contraceptive use.<sup>3</sup>

Figure 1

### Average number of children per woman by education level



SOURCE: Demographic and Health Surveys 1995-1999 (Calverton, MD: Macro International).

NOTE: For Mali, Zambia, and Nepal, data include secondary-level education and higher. The other three countries show secondary-level education only.

**National context is important in influencing family size, especially when female education levels are low.** The context in which education takes place is critical in shaping childbearing decisions. Researchers suggest that several aspects of national context are especially important<sup>4</sup>:

- *Universal education.* Fertility levels tend to decline more rapidly where schooling is widespread or primary school enrollment is nearly universal. When a larger proportion of the population is brought into the educational system, even a small amount of education may be associated with fertility decline. Researchers believe that as overall education levels rise, social norms concerning childbearing and parenting change. Even those women without much formal education will be affected by the changing community norms regarding smaller family size. In addition, parents with children in school or with educational aspirations for their children may choose to have fewer children. Schooling often increases the costs of having children.<sup>5</sup>

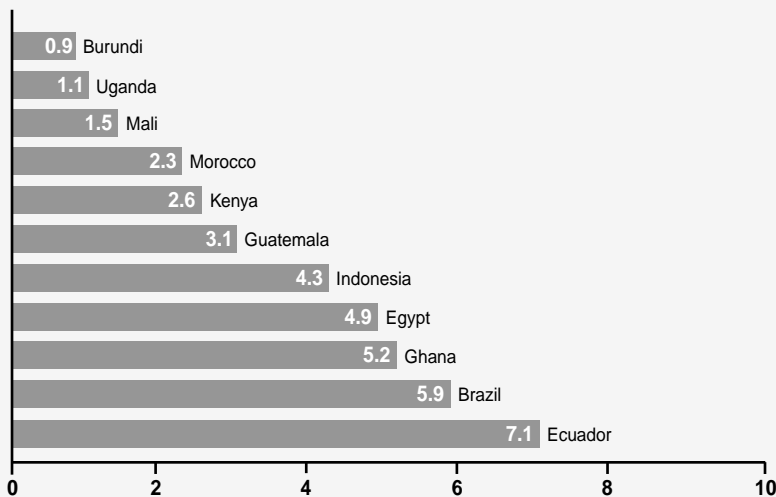
- *Exposure to the mass media.* In some settings, research suggests that universal education may be less crucial to fertility declines than in the past. In Côte d'Ivoire and Senegal, which have not achieved universal education, substantial fertility declines have occurred since the early 1960s. Researchers believe that a number of factors — including radio and television exposure — may be fulfilling some of the role that universal schooling played in the past.<sup>6</sup>

- *Strength of the family planning program.* A strong family planning program promotes smaller, healthier families. Even educated women may have a difficult time limiting the number of children they have if the services that they need — including information, counseling, and supplies — are not available. An analysis of survey data from 31 less developed countries found that when a country has a moderate to strong family planning program, even a modest level of education can be associated with a substantially lower fertility rate. By contrast, in countries with a weak or nonexistent family planning program, the fertility rate of married women with a few years of education is often higher than that of noneducated women.<sup>7</sup>

- *Availability of employment opportunities.* High levels of female labor force participation and higher wages for women are also associated with smaller family size.<sup>8</sup> A few years of education can result in smaller family size when they provide access to a job that offers a promising alternative to early marriage and childbearing. Working outside the home may expose girls to nontraditional roles and values. For working women, children might represent an “opportunity cost” in terms of lost earnings or lack of advancement. For these women, children may also mean a heavier “double burden” of household and work responsibilities.

Figure 2

**Average number of years of schooling among women, selected countries**



SOURCE: United Nations, 1996-97.

**Why do educated women have smaller families?**

At present, no scientific consensus exists about the exact processes by which education affects childbearing. Are special skills imparted through formal education that enable and encourage women to have fewer children? Theories abound regarding the different mechanisms involved.

Often, education is associated with characteristics that might lead a woman to choose fewer children: literacy skills, greater personal autonomy, and exposure to new values, ideas, and role models.

**Literacy skills — reading comprehension, in particular — appear to have a pronounced impact on family size.** Among women in South Africa, one study found that strong reading comprehension skills, regardless of family income level, affected family size. The study author suggests that access to information plays an important role in decisionmaking. Women with strong comprehension skills are better equipped to access and interpret information, whether it is provided in the classroom or through the mass media. More informed women, in turn, tend to have greater demand for and be better users of health services.

Are literacy skills more important than years in school? Research conducted in Ghana also found that higher female literacy is associated with lower fertility. This study determined, however, that the time spent in school had a strong impact on fertility over and above the effect of literacy skills alone. Years in school might influence fertility in different ways: by changing student values, by making it more likely that a girl will marry an educated husband who desires a smaller family, and by improving knowledge through family life education or other means.<sup>9</sup>

**Young women who are exposed to education, particularly at secondary levels, may be more likely to perceive that they have greater autonomy.** They may have a greater ability to make decisions, to move freely, to earn money, and to have control over their earnings. Even if they do not participate in the formal labor force, these women may bring a sense of autonomy into other areas of their lives. For example, they may have a larger role in the decision about the choice of a husband and the timing of marriage. Within marriage, they may have better rapport with their husbands, particularly in relation to childbearing decisions.<sup>10</sup>

Schooling may make new values and ideas, a wider social network, and different role models accessible to students. Similarly, having children who are in school may change the values and ideas of parents. Typically, the norms conveyed through

formal education promote the small, nuclear family.<sup>11</sup> Parents with children in school may also be more likely to view childhood as a time of growth and dependency; they may be less likely to view children as economic contributors to the household.<sup>12</sup>

### **The importance of nonschool factors**

Women who are more educated usually differ in many ways from their less educated counterparts. Often, they are wealthier, reside in urban areas, and have better access to services. To what extent do nonschool factors — socioeconomic status, ethnicity, parental education, individual goals, later age at marriage, and marriage to an educated husband — influence childbearing decisions? The relative importance of different factors probably varies from one setting to another. Husbands' education and household wealth typically influence fertility; however, most studies show that women's education has a greater impact on fertility.<sup>13</sup>

### **Equipping women to make healthy childbearing decisions**

**Efforts to improve educational attainment must continue regardless of any impact on childbearing practices.** But what conclusions may be drawn about the connection between education and childbearing? The research does not provide any simple formula governing years of education and family size. The effects of education on women depend upon a wide variety of social, cultural, and economic factors. With these caveats in mind, what are the policy implications?

■ *Promote universal education and secondary-level education.* Near universal enrollment in primary school and in secondary-level education is important in influencing childbearing decisions. In some low-resource settings, however, it may not be realistic to achieve universal education or high levels of secondary school attendance in the near future. Relatively few women in many less developed countries have seven or more years of schooling (see *Figure 2*). A study of education and fertility in sub-Saharan Africa concluded that “most countries are far from providing mass schooling for their populations, and as a result of war, economic

austerity, or high levels of population growth, some have witnessed stagnation or erosion of the educational gains of earlier decades.”<sup>14</sup> A key question for policymakers is whether it is feasible in the short-term to dramatically raise national education levels.

■ *Expand mass media and population education programs.* Radio and television programs can heighten awareness, promote new ideas, and encourage healthier behaviors. Population education can be incorporated into both in-school and out-of-school programs, conveying information about AIDS, gender equality, family planning, responsible parenthood, and other topics.

■ *Improve literacy levels.* Comprehension skills appear to play a special role in influencing childbearing decisions. Thus, enhancing literacy skills by improving school quality and by providing education programs for those not in school may yield economic, as well as population and health returns.

■ *Strengthen family planning efforts.* A strong family planning program provides women with the services and information required to make healthy childbearing decisions. Family planning services are a key ingredient in reducing family size and, for young people, in encouraging healthier transitions into adulthood.

■ *Provide employment and earning opportunities for women with basic education.* Research suggests that when women have promising employment and earning opportunities they may forgo early marriage and childbearing. Policies designed to increase women’s employment and wages may encourage smaller, healthier families.

## References

<sup>1</sup>United Nations, Department of Economic and Social Affairs, Population Division, *Linkages Between Population and Education* (New York: United Nations, 1997): 12.

<sup>2</sup>S.J. Jejeebhoy, *Women’s Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries* (Oxford, UK: Clarendon Press, 1995).

<sup>3</sup> Ibid.

<sup>4</sup>I. Diamond, M. Newby, S. Varle, “Female Education and Fertility: Examining the Links” in *Critical Perspectives on Schooling and Fertility in the Developing World*, C. Bledsoe, J. Casterline, J. Johnson-Kuhn, and J. Haaga, eds. (Washington, DC: National Academy of Science Press, 1999): 23-45.

<sup>5</sup> C. Lloyd, C. Kaufman, and P. Hewett, *The Spread of Primary Schooling in Sub-Saharan Africa: Implications for Fertility Change* (New York: The Population Council, 1999).

<sup>6</sup> Ibid.

<sup>7</sup> I. Diamond, M. Newby, S. Varle, “Female Education and Fertility: Examining the Links”: 32-33.

<sup>8</sup> Ibid.: 42-44.

<sup>9</sup> P. Glewwe, “School Quality, Student Achievement, and Fertility in Developing Countries” in *Critical Perspectives on Schooling and Fertility in the Developing World*, C. Bledsoe, J. Casterline, J. Johnson-Kuhn, and J. Haaga, eds. (Washington, DC: National Academy of Science Press, 1999): 128-131.

<sup>10</sup>S.J. Jejeebhoy, *Women’s Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries*.

<sup>11</sup> I. Diamond, M. Newby, S. Varle, “Female Education and Fertility: Examining the Links”: 37.

<sup>12</sup> C. Lloyd, C. Kaufman, and P. Hewett, *The Spread of Primary Schooling in Sub-Saharan Africa: Implications for Fertility Change*: 6.

<sup>13</sup> S.J. Jejeebhoy, *Women’s Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries*: 32.

<sup>14</sup> C. Lloyd, C. Kaufman, and P. Hewett, *The Spread of Primary Schooling in Sub-Saharan Africa: Implications for Fertility Change*: 51.

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