



An Educational Perspective On Indian Infant Health: The Effects Of Education Levels On Birth Outcome

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Abstract: The purpose of this study is to see if Indian mothers with greater levels of education produce healthier infants (N=342,734). According to the findings, Indian mothers with a higher educational level had healthier infants than Indian mothers with a lower educational level. In terms of statistics, one additional education year in India is linked to a 8.5816 gram rise in Indian birth weight and a 0.46 percentage point reduction in Indian low birth weight risk.

Keywords: Education; India; Birth Weight

Introduction

Half of fatalities of Indian children are caused by malnutrition in India. Childhood malnutrition has long-term effects on Indians, such as including cognitive impairment, a greater risk of chronic diseases, lower educational achievement, and lower productivity. Thus, policymakers in India have moved their focus to solving the health challenges of Indian children, with education seen as a feasible remedy.

The purpose of this study is to see if Indian mothers with greater levels of education produce healthier infants (N=342,734). Other studies have concentrated on more visible results of schooling, such as earnings, professions, and productivity, but this one contributes to the body of knowledge by focusing on less apparent effects, such as newborn health. Our findings, which are focused on India, contribute to the growing body of evidence concerning the health-education relationship across generations in India.

According to the findings, Indian mothers with a higher educational level had healthier infants than Indian mothers with a lower educational level. In terms of statistics, one additional education year in India is linked to a 8.5816 gram rise in

Indian birth weight and a 0.46 percentage point reduction in Indian low birth weight risk.

Data

Using data from the India Demographic and Health Surveys (IND-DHS), we investigate whether better educated Indian mothers give birth to healthier Indian children. The IND-DHS collects detailed information on Indian children aged 0 to 4. A number of Indian parental traits are also included in the IND-DHS. The number of schooling years completed by the Indian respondents is the key explanatory variable (Education).

| Table 1: Indian Summary Statistics | | | |
|------------------------------------|---------|--------|--------|
| | Mean | SD | N |
| | (1) | (2) | (3) |
| Indian Birth Weight | 2829.46 | 13.75 | 206414 |
| Indian Log Birth Weight | 7.923 | 0.233 | 206414 |
| Indian Low Birth Weight | 0.176 | 0.380 | 206414 |
| Indian Education | 5.552 | 5.114 | 342614 |
| Indian Age | 26.844 | 5.255 | 342734 |
| Indian Number of Offspring | 2.505 | 1.448 | 342734 |
| Indian Living in Rural Areas | 0.738 | 0.440 | 342734 |
| Indian Currently Married | 0.999 | 0.032 | 342734 |
| Indian Offspring Age in Month | 27.681 | 16.583 | 342734 |
| Indian Offspring Being Male | 0.520 | 0.500 | 342734 |
| Indian Plural Birth | 0.006 | 0.079 | 342734 |

The statistical breakdown of the variables in this Indian investigation is shown in Table 1. Our sample includes around 342,734 Indian births. Indian offspring had an average birth weight of 2829.4 grams, a log birth weight of 7.923, and a low birth weight rate of 17.6%. The average length of time spent in school in India is 5.552 years. The average age of Indian responders is 26.844. The average number of children per Indian respondent is 2.505. The Indian population lives in rural areas is 73.8%, with 99.9% of married Indian. The Indian offspring have an average age of 27.681 months. Males make up 52.0 percent of all Indian children. Multiple births make up 0.6% of all Indian births.

Empirical Design

To see whether more educated Indian women had healthier Indian children, we estimate the following regression,

where the subscripts j , i , s , and t refer respectively to Indian offspring, women, cluster, and survey date in India. $lnbw_{ijt}$ stands for Indian birth weight, $lnbw_{ijt}$ Indian birth weight in log, and $lnlbw_{ijt}$ Indian risk of low birth weight.

edu_{it} is the number of educational years Indian respondents completed. lnn_{it} includes Indian number of offspring, age_{it} age, age_{it}^2 squared-age, whether Indian lives in rural areas, whether Indian is currently married, whether Indian offspring is a plural birth, whether Indian offspring is male, age_{it} Indian offspring age in month, age_{it}^2 squared-age in month, Indian birth date fixed effects, Indian residential cluster fixed effects and Indian survey time fixed effects. ϵ_{ijt} is the error term.

The coefficient β is the effects of more educated Indian mothers on birth outcomes. In other words, reflects the difference in birth outcome of Indian women living in the same area but with different levels of education.

Results

Birth Weight - The relationship between Indian mother education and birth weight in India are in Table 2. Column 1, where only Indian mother education is controlled for, displays the relationship between Indian mother education and birth weight in India. We find that one extra school year in India is associated with a 8.3672 gram increase in Indian birth weight.

The estimate only represent the connection between Indian mother education and birth weight in India, while key elements in India are not taken into consideration. For example, Indian with advantage backgrounds may have better access to Indian healthcare system and education simultaneously . As a result, from Columns 2 to 3, we add the collection of Indian attributes and Indian spatial-temporal fixed effects. Then, according to Column 3, we find that one additional school year in India is linked to a 8.5816 gram gain in birth weight.

| Table 2: Indian Birth Weight | | | |
|------------------------------|-----------|------------|-----------|
| | (1) | (2) | (3) |
| Indian Education | 8.3672*** | 10.3907*** | 8.5816*** |
| | (0.2684) | (0.2982) | (0.3603) |
| Observations | 206404 | 206404 | 203911 |
| Cluster FE | . | . | X |
| Characteristics | . | X | X |

Log Birth Weight - The relationship between Indian mother education and log birth weight in India are in Table 3. Column 1, where only Indian mother education is controlled for, displays the relationship between Indian mother education and log birth weight in India. We find that one extra school year in India is associated with a 0.35% increase in Indian birth weight.

The estimate only represent the connection between Indian mother education and birth weight in India, while key elements in India are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Indian attributes and Indian spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Indian mother is associated with 0.36% gain in birth weight.

| Table 3: Indian Log Birth Weight | | | |
|----------------------------------|-----------------------|-----------------------|-----------------------|
| | (1) | (2) | (3) |
| Indian Education | 0.0035*** (0.0001) | 0.0042*** (0.0001) | 0.0036*** (0.0001) |
| Observations | 206404 | 206404 | 203911 |
| Cluster FE | . | . | X |
| Characteristics | . | X | X |

Low Birth Weight - The relationship between Indian mother education and low birth weight in India are in Table 4. Column 1, where only Indian mother education is controlled for, displays the relationship between Indian mother education and low birth weight in India. We find that one more educational year of Indian mother is associated with 0.38 percentage point reduction in low birth weight.

The estimate only represent the connection between Indian mother education and birth weight in India, while key elements in India are not taken into consideration. As a result, from Columns 2 to 3, we add the collection of Indian attributes and Indian spatial-temporal fixed effects. Then, according to Column 3, we find that one more educational year of Indian mother is associated with 0.46 percentage point reduction in low birth weight.

| Table 4: Indian Low Birth Weight | | | |
|----------------------------------|------------------------|------------------------|------------------------|
| | (1) | (2) | (3) |
| Indian Education | -0.0038*** (0.0002) | -0.0047*** (0.0002) | -0.0046*** (0.0002) |
| Observations | 206404 | 206404 | 203911 |
| Cluster FE | . | . | X |

| | | | |
|-----------------|---|---|---|
| Characteristics | . | X | X |
|-----------------|---|---|---|

Conclusion

The purpose of this study is to see if Indian mothers with greater levels of education produce healthier infants (N=342,734). Other studies have concentrated on more visible results of schooling, such as earnings, professions, and productivity, but this one contributes to the body of knowledge by focusing on less apparent effects, such as newborn health. Our findings, which are focused on India, contribute to the growing body of evidence concerning the health-education relationship across generations in India.

According to the findings, Indian mothers with a higher educational level had healthier infants than Indian mothers with a lower educational level. In terms of statistics, one additional education year in India is linked to a 8.5816 gram rise in Indian birth weight and a 0.46 percentage point reduction in Indian low birth weight risk.

Our findings are relevant to research into the impact of several variables on Indian health. For example, governmental responses to diseases may have an impact on Indian health; heavy rain and heat in India worsen illness; political violence and food scarcity in India may connect to poor survival rates; literacy, land reform, and nutrition efforts improve health (Nguyen, 2021a, 2021b; Le, 2021a, 2021b).

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