

To Reduce Stunting, Space Out Births

TGI study shows that policies promoting birth spacing of at least three years could help to prevent stunting

Study Overview

To assess whether first-born children in India have a height advantage over their siblings, researchers used data from the fourth round of the National Family Health Survey to explore the linkages between birth order, time between births, and relative height-for-age.

Background

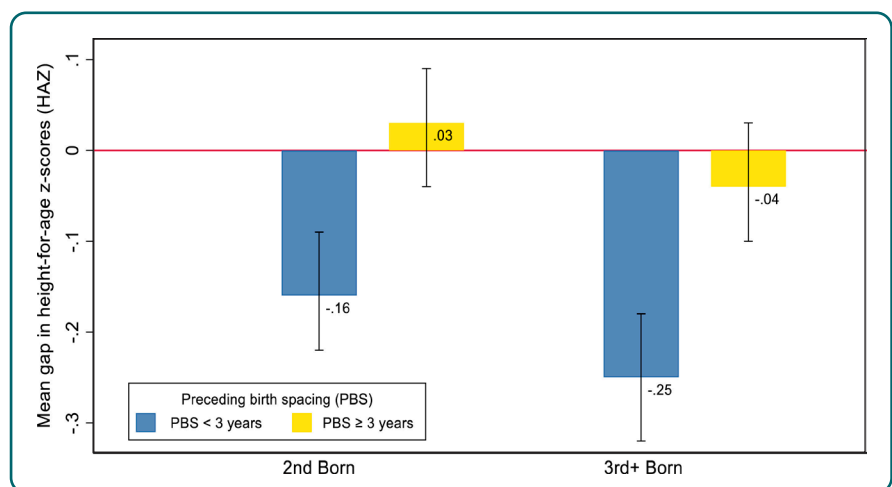
A marker of chronic undernutrition, stunting is widespread in low- and middle-income countries, with significant, long-lasting implications for children's wellbeing. Beyond low height, stunting leaves children vulnerable to disease and at risk of lower cognitive ability.

Among the known causes of stunting are poverty, inadequate nutrition, poor diet, poor maternal health during pregnancy and breastfeeding, teen pregnancy, poor disease environment, and frequent illness. Considerable evidence also shows that birth order influences stunting, with children born after the first child at higher risk.

India's family planning policies have focused on lowering population growth and postponing pregnancy to improve maternal health outcomes. But while the overall fertility rate has fallen as low as 2.1, there has been little progress increasing the period between births. In 2015, approximately 60% of women surveyed waited less than the recommended period of three years between children.

RESULTS

According to the study, birth order affects height when births occur less than three years apart, with the height gap increasing between later-born children. However, when the time between births is three years or more, the height advantage of earlier-born children is insignificant.



Child height gap by birth order. The bars represent the mean gap in HAZ-scores between firstborn and later-born children [second-born and third(+)-born]. The gap is estimated for two lengths of PBS, i.e., with PBS < 3 y and PBS ≥ 3 y. The confidence band is constructed at 5% level of significance.

The amount of time between pregnancies affects maternal and child health in several ways. A mother's body needs time after birth to replenish key micronutrients, so getting pregnant again too quickly may reduce the nutrients available to the fetus and limit milk production. Having children too close together also makes it more difficult for parents to devote adequate time and resources to each child.

POLICY RECOMMENDATIONS

- Promote sufficient birth spacing through family planning and other public health programs and policies.
- Integrate family-planning approaches into nutritional interventions.

Dhingra, S., and Pingali, P. Effects of short birth spacing on birth-order differences in child stunting: Evidence from India. *PNAS* (2021).

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