

Fact Sheet #3 Postnatal Discrimination against Indian Girls: Severe Stunting, 1992-2006

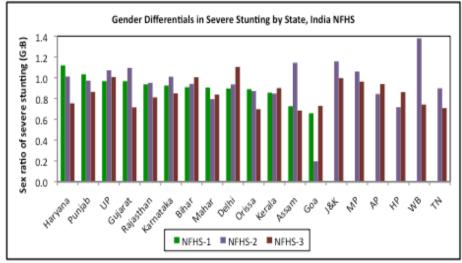
While there are no observable gender differences in severe stunting at the national level, disaggregating the data reveals that girls are at higher risk than boys in some states. Also, rural girls with two or more older sisters have significantly higher risk of severe stunting than other children.

Data and Definitions

Severe stunting is calculated from data on height measurements and child's age in the three rounds of the National Family Health Survey (NFHS) conducted in 1992-1993, 1998-1999 and 2005-2006. The height measurements are standardized relative to an international reference population recognized by the World Health Organization. Stunting levels more than three standard deviations below the median for this population are considered severe. For our analysis, we calculate a sex ratio of severe stunting, measured as the ratio of severe stunting for girls relative to boys, ages 6 to 35 months. A ratio of one implies equal risks for girls and boys. The higher the ratio, the higher the risk of severe stunting for girls compared to boys. We use severe stunting, a chronic form of malnutrition, as the measure of nutritional discrimination because it is the nutritional measure most likely to reflect persistent discrimination in food and nutrition.

Significant Findings

 Overall levels of severe stunting declined for boys and girls in both rural and urban areas between 1992 and 2006. However, severe stunting remains high, with 23 percent of girls and 25 percent of boys severely stunted in 2005-2006.



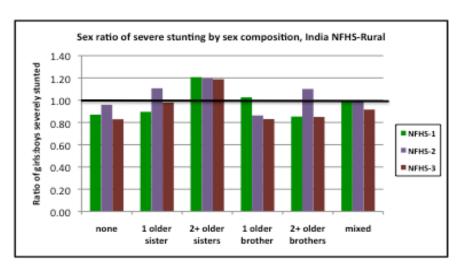
- At the national level,
 girls were less likely to
 be severely stunted than boys
 - be severely stunted than boys in each survey. Disaggregating the data, however, yields a more nuanced picture.
- Gender differentials in severe stunting vary by state.
 - In most states in any time period, gender differentials in severe stunting do not exist.
 - There are a few exceptions. In 1992, girls in Haryana were 12 percent more likely to be severely stunted than were boys. However, this disadvantage disappeared over time. In

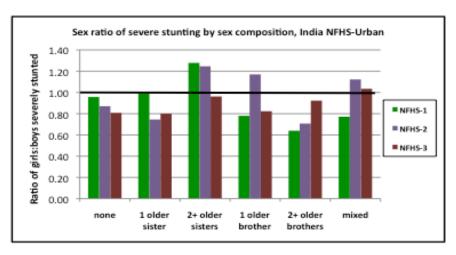
¹ The NFHS-1 and NFHS-2 used the U.S. National Center for Health Statistics (NCHS) Standard, which was recommended at that time by the World Health Organization (WHO). The NFHS-3 uses a new international reference population released by WHO in April 2006. Nutritional status in NFHS-2 has also been recalculated using the new WHO standard.

1998-1999, girls faced a nutritional disadvantage in five states across northern and eastern India. By 2005-2006, only girls in Delhi were more likely (10 percent) to be severely stunted than boys.

- At the household level, girls with two or more older sisters face a nutritional disadvantage and are more likely to be severely stunted than children with other combinations of older siblings.
 - In rural areas across all three surveys, girls with two or more older sisters were approximately 20 percent more likely to be severely stunted than boys with two or more older sisters.

 These girls were most likely to be severely stunted compared to all children.
 - In urban areas, girls with older sisters also had notably higher risks of being severely stunted compared to boys with older sisters in 1992-1993 and 1998-1999. However, by 2005-2006, this differential disappeared.





Implications

Severe stunting remains a serious child health problem in India. It is necessary to disaggregate the data beyond the national, urban and rural levels to observe gender differentials in severe stunting during early childhood. It is especially important to recognize that not all girls face equal discrimination. Rather, birth order and sex composition of other siblings matter. Girls with two or more older sisters have the highest likelihood of being severely stunted compared to other girls or boys. In rural areas, postnatal discrimination against girls in the form of severe stunting has persisted through 2005-2006, but disappeared in urban areas. This is perhaps due to lower son preference or greater use of prenatal discrimination.

This fact sheet was prepared for ICRW-Nankai University consultation, the Counting Girls project, held in New Delhi, April 1-2 2009. This project is supported by IDRC. For further information, please contact Rohini Pande (rohinipande@jhu.edu), Priya Nanda (pnanda@icrw.org), or Susan Lee-Rife (sleerife@icrw.org).