15th PN-AB

Nutritional Surveillance

for Disaster Preparedness and Prevention of Nutritional Blindness

Summary Report on Gender Differentials in Undernutrition

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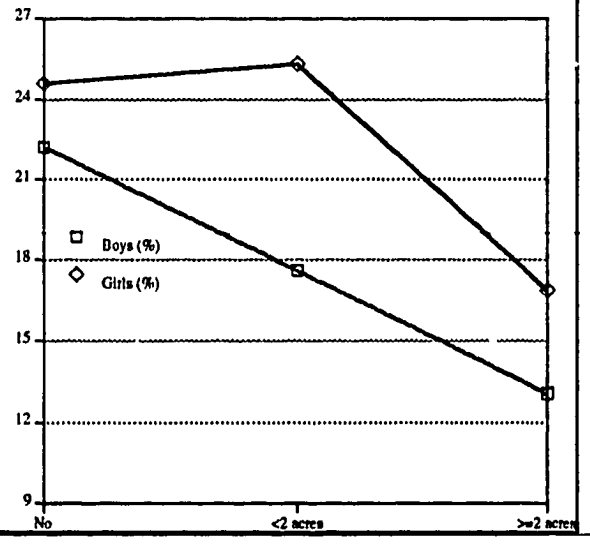
Gender biased behaviour, discriminating against females, has been described in many developing countries, and is likely to be more common in Asian and/or patriarchal societies (1). Bangladesh is a traditional, patriarchal society where most parents have a strong preference for male offspring. It is therefore not surprising that sex biased discrimination is a common observation in Bangladesh. Gender bias in food allocation and access to health care is reflected in differences in mortality rates and in the nutritional status of young children (2- 7). Several studies have indicated that gender biased behaviour is most marked in the relatively better-off households (8-10). Mother's education was found to be an important factor in determining a child's nutritional status and at the same time the only factor able to reduce gender differences in undernutrition (10). However, mother's education is also closely related to other socioeconomic indicators and might be a modifying factor when examining the relationship between household socioeconomic status and child nutritional status.

Figure 1.

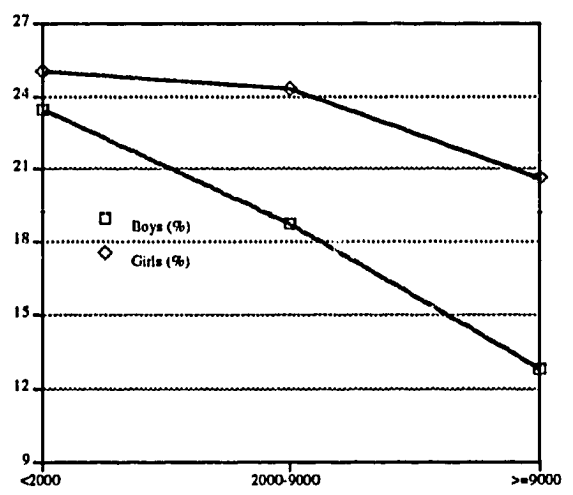
Prevalences of acute undernutrition by weight for age below -3Z scores among children aged 6 to 59 months of age by size of agricultural land owned, Bangladesh, December 1992



To eliminate this possibly modifying effect of mother's education, the influence of improving socioeconomic status on boys' and girls' nutritional status was assessed in households with illiterate mothers (11). This compares rather well with the reality in Bangladesh, where approximately 70% of the mothers never had any schooling (12). The study population comprised of 3,754 rural households and anthropometric measurements were taken on 5,121 children aged 6 to 59 months old, of which 2,508 were girls and 2,613 were boys. Data was collected in December 1992 as part of a nutritional surveillance project (12) and a set questionnaire was used to collect information on socioeconomic status. The following indicators for socioeconomic status were used : size of agricultural land owned, value of the house and the number of years of father's education. For this summary, only Weight For Age (WFA) will be used as indicator of nutritional status. WFA is a commonly used indicator, which reflects both acute and chronic undernutrition. 3 Z scores below the median of the reference population was used as the cut-off point to indicate severely underweight children. It should be mentioned however that other indicators (Mid Upper Arm Circumference, indicating acute undernutrition, and Height for Age, indicating chronic undernutrition) showed similar results.

Figure 2.

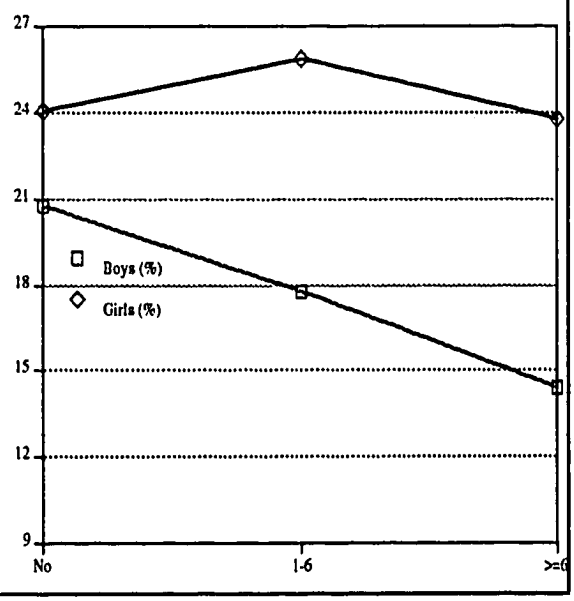
Prevalences of acute undernutrition by weight for age below -3Z scores among children aged 6 to 59 months of age by house value in Taka, Bangladesh, December 1992



In landless households there is little difference in rates of undernutrition between boys and girls. Rates decline in boys with increasing land size, in girls this decline is only observed in households owning more than 2 acres of land (Figure 1). With increasing housevalue, the prevalence of undernutrition in boys decreases sharply. There is decline in girls' undernutrition, however far less pronounced than in boys, resulting in an increasing gender gap (Figure 2). Most striking is the effect of father's education. Whereas boys clearly benefit from an educated father, the effect on the girl's nutritional status is hardly notable (Figure 3).

Figure 3.

Prevalences of acute undernutrition by weight for age below -3Z scores among children aged 6 to 59 months of age by number of years of father's education, Bangladesh, December 1992



Gender biased behaviour, and especially gender disparities in undernutrition are important features of Bangladeshi society. This may have serious implications for the health of girls and may even jeopardize their ability to fulfil their future roles as mothers, workers and members of society. The increasing gender gap with improving socioeconomic status indicates that poverty alleviation programs - a key issue in development activities in Bangladesh - might actually be of little benefit for girls. Illustrative in this respect is the experience of the Tamil Nadu Integrated Nutrition Project in India, which involved, besides nutrition intervention, a great deal of nutrition education. Despite this, the terminal evaluation found that gender disparity in undernutrition was worse compared to the pre-project situation (13). On a country-wide scale, it seems likely that fundamental changes in the role of women will be required along with poverty alleviation, to reduce sex biased discrimination. It will be clear that such a solution cannot be found in the next decade, nor even in the next generation.

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