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## The Disadvantaged Girl Child in Bihar: Study of Health Care Practices and Selected Nutritional Indices

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The under five mortality rate and other indicators of health development are relatively poor in the state of Bihar. In this context, recently a lot of attention has been focussed towards the welfare of the "girl child" to counteract the perceived gender bias(l-3). Discrimination against the weaker sex often begins at birth(l). However, there is a paucity of objective data from this state quantifying the gender bias, if "any, against the "girl child". The present study explores the sex differentials in health care practices and selected nutritional profile.

## **Subjects and Methods**

Data from the present analyses was collected from two sources: (i) Depart-

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Received for publication: March 20, 1992; Accepted: October 8,1994 ment of Pediatrics, Patna Medical College Hospital, and (ii) Door to door field based surveys from the Bihta and Bikram Blocks of Patna District. The data from the former source, for the year 1983 to 1990, was obtained from the hospital registers for comparison of outpatient attendance, hospitalizations and immunizations. In addition, the prevalence of malnutrition(4) and the prevalence of low birth weight (<2500 g) in hospital deliveries was compared for 1 year. The data from the field based surveys was used for comparison of iron and vitamin A deficiencies (clinical impression of investigators).

## **Results and Discussion**

The trends in sex differentials of health care practices between the year 1983 to 1990 are depicted in Figs. 1&2. It is obvious that boys were preferentially hospitalized or shown in the outpatient department. The bias was more evident for hospitalizations, especially between the years 1983 to 1987. There was a distinct downtrend in the male preferences for hospitalizations, especially from 1989 (Fig. 1); the male to female ratio being 60:40 after 1989. These results are compatible with earlier experience from New Delhi(1). The reported male to female ratio from different parts of India ranges from 2.1:1 to 1.3:1, the latter being mainly from the South(1). The small but perceptible downtrend in male preference is welcome and perhaps a reflection of the increasing awareness of giving the "girl child" her due.

The trends in sex differentials of immunization (Fig. 2) for three vaccines (DPT, OPV and DT) yield essentially similar information. The total DPT, OPV

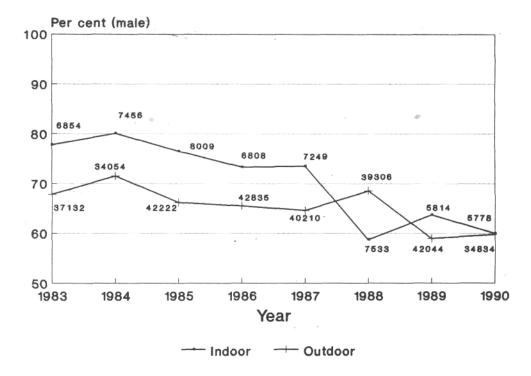


Fig. 1. Changes in percentages of males hospitalized and outdoor attendance between the years 1983 to 1990. The figures in relation to lines indicate the total sample size.

and DT immunizations during this period (1983 to 1990) ranged from 28306 to 41191; 33738 to 52267; and 3135 to 9146, respectively. In conformity with earlier impressions(l), preferential immunization of males is evident. However, there is again a welcome evidence of a reduction in this bias after 1988.

Table I summarizes the sex differentials in relation to selected nutritional indices. The disadvantaged nutritional profile of the girls vis a vis boys is in consonance with the earlier limited (mostly indirect) data in this context from the country. Strictly speaking, the prevalence of low birth weight is a reflection of the biological attribute in relation to

**TABLE I**— Percentage Prevalence of Selected Nutritional Indices in Relation to Sex.

Nutrition Index	Male	Female
Low birth weight	37	- 42
Protein energy malnutrition	44	56
Iron deficiency anemia		
Rural	38	43
Urban	24	26
Vitamin A deficiency		
Rural	15.2	12.1
Urban	9.3	8.2

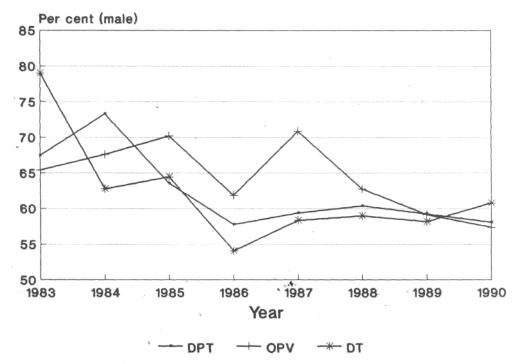


Fig. 2. Changes in percentages of immunized males between the years 1983 to 1990.

sex; the mean birth weights in girls were lower (2800 g vs 2850 g).

It is concluded that in the state of Bihar, there is an appreciable gender bias in health care practices and selected nutritional indices with a welcome perceptible reduction in this discrimination over the years. Urgent efforts are warranted for the sustained upliftment of the "girl child", the future mother.

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