Impact of the 1998 Flood on Nutrition and Health: What Can We Learn for Future Disasters?

Lynnda Kiess, Andrew Thorne-Lyman, Mugo Muita, **Shahriar Reza Khan**, Abdul Q. Mondal, and Nasreen Hug

Objective: Assess the impacts of the 1998 flood on child nutrition and health, and identify the possible solutions to prevent and stabilize malnutrition and poor health after such disasters.

Methodology: A special study was conducted as part of the Nutrition Surveillance Project (NSP) to follow the nutrition and health status of children in areas where the 1998 flood had been severe. A random sample of approximately 600 households in each of the seven severely flood-affected areas was interviewed during October and December 1998 and in February 1999. Anthropometric measurements and health information on preschool children and their mothers were collected. Nationally representative data from the NSP and previous data from four of the flood-affected thanas were used for comparing the health and nutrition situation immediately after the flood and up to six months after the flood.

Results: Acute child malnutrition was 15.8% in October 1998 in the seven severely flood-affected areas. The peak in October 1998 was unusual when compared to the national patterns of wasting in rural Bangladesh. The prevalence of wasting was significantly higher (16.3%) in October 1998 than in October 1996 (11.4%), and the prevalence in the flood-affected areas remained high in December 1998 (12.7%) and February 1999 (10.5%) than during the corresponding months in 1996-1997 (6.6% and 7.0% respectively). The rate of the incidence of diarrhoea was significantly higher in the severely affected areas (17.6%) than the national estimate immediately following the flood (9.9%), and was also higher than that of 1996-1997 (7.7%). As of late September 1998, only approximately 6% of the households in the severely affected areas surveyed by the NSP had received any type of relief assistance. Even in mid-November 1998, approximately 50% of the flood-affected households failed to receive any relief. The households who received assistance were most likely to have received rice or wheat, but the quantities received were less than adequate.

Conclusion: Aside from small-scale efforts, since relief generally came too late for many households, and rehabilitation efforts were minimal, the majority of the households re-established their livelihood themselves through loans or other means. As a result, the increase in childhood malnutrition that resulted immediately after the flood has not been ameliorated more than six months later. These findings suggest that better planning and coordination is needed to manage disaster relief efforts in Bangladesh. If relief had reached households more rapidly and had been better targeted, children might have been prevented from becoming ill and malnourished. Better immediate relief and rehabilitation might have made prolonged food assistance less necessary, eventually translating into savings for both government and aid agencies.

¹Helen Keller International, Bangladesh, House 38, Road 14A, Dhanmondi Residential Area, Dhaka 1209, Bangladesh

²Institute of Public Health Nutrition, Mohakhali, Dhaka 1212, Bangladesh