

EDITORIALS

Misunderstanding malnutrition

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Recent reports in the media about illness and death due to malnutrition, in the *adivasi* belt in Maharashtra and in the slum colonies of Mumbai, have once again highlighted the persistent and deteriorating problem of chronic hunger in India.

Feeling hungry is natural—human beings as well as animals experience hunger when the glycogen level of the liver falls below a certain point. However, chronic hunger or malnutrition refers to food deprivation due to poverty, political conflict or famine; it is far from a natural process.

Malnutrition among children as well as adults is widely prevalent in India. The nutritional status of children is expressed as the proportion of weight for age, height for age, or weight for height. In adults, the nutritional status is commonly expressed as the Body Mass Index (BMI). Anaemia and vitamin and micronutrient deficiencies are symptoms of malnutrition.

The prevalence of low weight is greater in rural areas in India (50 per cent) than in urban areas (38 per cent). It is higher among girls (48.9 per cent) than among boys (45.5 per cent). It is higher among scheduled castes (53.2 per cent) and scheduled tribes (56.2 per cent) than among other castes (44.1 per cent). (1)

The effects of malnutrition

As many as 46 per cent of children in South Asia have low weight for their age. This accounts for half the world's underweight children. The girl child is more likely to be underweight than boys due to gender discrimination in South Asia (2). The proportion of malnourished children has been declining in many countries of this region but the progress is slow in India and Pakistan. This is mainly due to a deficient diet, limited access to safe drinking water and sanitation, and the low social and educational status of women, who are the primary care-givers of children.

India has the highest prevalence of underweight children in the world, nearly twice as many as in sub-Saharan Africa. In at least six states – Madhya Pradesh, Rajasthan, Orissa, Uttar Pradesh, Bihar and Maharashtra – one in every two children is underweight (3). About 30 per cent of Indian children are born with low birth weight and most of their growth retardation occurs by the age of two. The retardation is largely irreversible. In 1998-99, 47 per cent of children in India below the age of three were moderately or severely underweight, nearly 46 per cent were stunted and 15 per cent were wasted. This is less by five per cent from the 1992-93 levels, but the decline is slower when compared to other countries with similar economic growth rates.

Malnutrition retards children's physical and cognitive development and increases susceptibility to disease. Malnutrition is estimated to be associated with more than half of child deaths from major diseases like malaria (57 per cent), diarrhoea (61 per cent), pneumonia (52 per cent) and measles (45 per cent) (1).

Malnutrition also increases susceptibility to disease among adults, which in turn worsens their nutritional status. Malnourished adults are less able to work and therefore earn less, which results in the entire family consuming less food. This vicious cycle of hunger leading to poverty exacerbates the hunger and poverty.

Response of the medical profession

"What do we in the health department have to do with malnourished children? Aren't they the problem of the women and child development department?" This question, asked by a senior official, reflects the belief of many doctors.

Health professionals must examine the belief that hunger and malnutrition need not concern us. We must also reconsider the view that if a malnourished adult or child comes to us with an illness, we should treat it purely as a medical condition. When a majority of Indians live with chronic hunger, the medical profession cannot remain unconcerned or ignore the social context of this debilitating condition.

But the inability to recognise malnutrition as a predominantly social problem is widespread in the medical profession. This inability leads to the problem being addressed in an inappropriate and sometimes callous manner.

The family of a child with malnutrition is likely to belong to the lower socio-economic classes and may not be able to afford anything but the most inexpensive treatment. Medical professionals often ignore this obvious fact, which leads to such inappropriate

responses as the child being prescribed expensive tonics, supplementary foods and high-dose multivitamin preparations. Treatment of this kind is usually beyond the means of the family and the cost pushes them further into debt.

Our experience with young medical graduates shows that they often lack the skills and knowledge to manage a case of malnutrition. The means to manage cases of malnutrition are also lacking at the primary health-care level. A misconception persists that malnutrition requires specialist paediatric skills. It is imperative and entirely feasible for most cases of malnutrition to be managed at the primary health-care level. A small proportion of cases, mainly those with associated diseases, may require referral. These can be managed at the secondary health-care level.

A typical response of the public health-care system and nongovernmental organisations attempting to provide health services in remote rural areas, where malnutrition is common, is to organise "health camps". These camps cater to ordinary sicknesses and minor problems in a superficial manner. Preventive health care is generally bypassed and the more serious underlying and long-term problems such as malnutrition are ignored. The camps are infrequent and irregular and do not allow for follow-up of any chronic illnesses even when they are diagnosed.

Health professionals tend to neglect the preventive aspect of malnutrition partly because they think this aspect is not important. Children are seldom weighed as a routine part of their health care. Health professionals lack the time or the inclination to give information about basic measures such as breast-feeding, nutrition for children, inexpensive and locally available nutritious foods, the prevention and management of diarrhoea, and the importance of monitoring growth. Health professionals often don't understand the relationship between malnutrition and other major diseases of childhood like diarrhoea, acute respiratory infection, measles and malaria.

The ICDS and malnutrition

The Indian state's primary response to child malnutrition has been the Integrated Child Development Services (ICDS) programme, which was started in 1975. It purportedly reaches over 90 per cent of our child population. But regardless of the indicator of ICDS coverage—the percentage of villages with an *anganwadi* centre, the number of beneficiaries, or public expenditure on ICDS—access to the programme appears to be the poorest in states with the worst nutrition indicators (1).

States with a higher percentage of underweight children tend to have a smaller percentage of children enrolled in the ICDS programme. An example is Bihar, where 55 per cent of children are underweight, but only 1.5 per cent of children are enrolled. Total public expenditure figures show that the four states with the highest prevalence of underweight children (Bihar, UP, Rajasthan and MP) are the states that receive the least for ICDS on a per child basis.

A recent World Bank report (1) has analysed the strengths and weaknesses of the *anganwadi* centres, and detailed issues such as attendance and food availability.

Some state governments have begun focusing on children detected as severely malnourished by the *anganwadi* centres. They are given a double ration of supplementary nutrition. But this ignores the underlying disease that is aggravating the malnutrition. When these children are referred to a hospital, the treatment is usually incomplete, sometimes incorrect, and often irrational. In all this, the large majority of children who are moderately underweight are ignored, though they are equally susceptible to the worsening of their nutritional status, to illness and to death.

As is evident, malnutrition is a problem with many dimensions – social, cultural economic, health, educational and nutritional. It is serious among children but its prevalence among adults must not be forgotten. The medical profession must recognise the complex nature of malnutrition and address it holistically.

References

1. Gagnolati M, Shekar M, Das Gupta M, Bradenkamp C, Lee Y-K. *India's undernourished children: a call for reform and action*. HNP discussion paper, The World Bank; 2005 August.
2. United Nations Children's Fund. *Progress for children: a report card on malnutrition*. Number 4, UNICEF; 2006 May. [cited 2006 July 15]. Available from: <http://www.unicef.org/progressforchildren/2006n4/>
3. Ministry of health and family welfare, government of India. *National Family Health Survey 1998-99*. Mumbai: International Institute of Population Sciences; 2000.