

*NSA***Disease-Related Malnutrition****Malnutrition and the burden of disease**

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Malnutrition is a major cause of disease burden in many developing regions, and is a principal factor inhibiting further rapid declines in child mortality. Almost 50% of children in India and neighbouring countries are clinically underweight (<2 SD weight for age), as are about one-third of children in Africa, and 10-25% of children in other developing countries. The prevalence of specific micronutrient deficiencies (vitamin A, zinc) varies from 20-60% in Africa and South-East Asia to less than 5% in developed countries. Approximately one-tenth of the population worldwide suffer from iron deficiency. The principal impact of underweight on the global burden of disease is through diarrhoea and pneumonia; even mild undernutrition places a child at increased risk. Worldwide, underweight caused an estimated 3.7 million child deaths (out of 10.8 million) in 2002. Of these, 1.8 million were in Africa, and 1.2 million in India and neighbouring countries. In terms of disease burden as measured by DALYs (Disability Adjusted Life Years), underweight caused almost 10% (9.5%) of the entire global burden of disease, making it the leading risk factor worldwide. In addition, iodine deficiency disorders were estimated to cause another 2.5 million DALYs (0.2% of global disease burden), one-quarter of which occurred in Africa. Iron deficiency caused an estimated 0.8 million deaths (2.4% of global DALYs), with one-third of the burden in South-East Asia, 30% in Africa and 15% in the Western Pacific. Another 0.8 million deaths worldwide are attributable to vitamin A deficiency, as are almost 2% of DALYs (4-6% of disease burden in Africa). Zinc deficiency accounted for a similar number of deaths, but a much higher share (2.9%) of global disease burden. Zinc deficiency affects about one-third of the world's population.

Collectively, this cluster of undernutrition and micronutrient deficiencies caused about 6 million deaths in 2000 (11% of the global total) and about 17% of the entire global burden of disease. Much of this disease burden occurs among children. Indeed, these estimates suggest that at least half of all child deaths each year could be prevented if undernutrition and associated micronutrient disorders could be eliminated.