

## Tackling the double burden of malnutrition across the life course: a global imperative

It is appropriate that this issue of *Ciência & Saúde Coletiva* focuses on public health nutrition, a subject of ever increasing global significance. The “double burden of malnutrition” (DBM) concept first described in the early nineties, is now recognized to have a life-course causality, with stunted populations being more susceptible to the nutrition related non-communicable diseases such as raised blood pressure and diabetes. Overnutrition and undernutrition commonly coexist in the same communities and even the same households, affecting both rich and poor countries alike. Malnutrition is currently affecting at least a half of the global population. While young child stunting is affecting about a quarter of the world’s children, about a third of the world’s adults are overweight or obese. Anaemia is also affecting about a third of women of reproductive age and almost a half of preschool children. Maternal and child undernutrition in the aggregate is a cause of almost a half of all child deaths and the global economic impact of obesity has been estimated at roughly US\$2.0 trillion, or 2.8 percent of global GDP.

In order to tackle the DBM problem a multisectoral approach is essential. The first priority is to ensure that infant and young child growth is optimal from conception to two years of age, and this requires concerted efforts from many sectors. Health sector must ensure that low birth weight rates are brought down by improved antenatal care and that infant feeding practices are improved post-partum. Education sector should ensure that adolescent girls remain in school until 18 years and are prepared for parenthood prior to leaving school. Agriculture sector should look to support women farmers especially, encouraging the production of nutrient rich foods for home consumption as well as for market. The food industry can help by fortifying staple foods with micronutrients as well as being restrained and responsible in its advertising and marketing practices. Water and sanitation sector should seek to control gastrointestinal and diarrhoeal diseases especially, and among young mothers and their infants in particular. Social protection sector should look to link cash transfers to households with poor families and young mothers especially, conditional on nutrition, health and education promotion where feasible.

Tackling stunting during the first 1000 days is not enough however, as much must also be done across the life course to prevent obesity escalating before adulthood. This will require multiple sector contributions as well, but with the Education sector taking the lead, so that children graduate from school with adequate life skills and appropriate behaviours that help them avoid these risks in adulthood. Ensuring adequate life skills are facilitated beyond school by supportive social environments that are non-obesogenic will also require government support, be it through taxation, regulation and/or subsidization. Ensuring that physical activity is facilitated and easily available, and that access to quality diets is affordable, without the promotion of unhealthy products and habits through the media, goes beyond the realms of “self will” alone.

In order to achieve such a life course multisectoral approach effective coordination mechanisms are essential, which in a centralized system of government should be above ministerial level, and be guided by an agreed multisectoral framework for action. Efforts to create such multisectoral approaches should include incentives for local leaders to take up the challenge. Considerable external support will be needed initially in terms of capacity building and help to construct monitoring and evaluation tools.

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