

## Editorial

### **Nutrition Security in India: who exactly is in charge?**

Health and nutrition are intimately and intricately intertwined. Two important meetings were held in India in 2009 on matters related to nutrition and human health. The first was a workshop during January 14-16, jointly organized by the Indian Council of Medical Research (ICMR) and the Canadian Institutes of Health Research (CIHR). Its report, titled “Childhood Obesity and Non-communicable Diseases” is available on the ICMR website<sup>1</sup>. The second was a symposium during August 3-4, organized by the Indian National Science Academy (INSA)<sup>2</sup>. Its position paper titled “Nutrition Security for India: Issues and Way Forward” was released during INSA’s Platinum Jubilee meeting in Kolkata on December 7, 2009 and is available on the INSA website<sup>3</sup>.

In recent decades the whole world has been facing obesity as a huge problem of health and longevity of life. While India is no exception, and obesity prevalence is on the rise right from childhood, there is a peculiarly India-specific problem of high prevalence of both obesity and undernutrition, existing side by side. A challenging question was recently posed in the Op-Ed columns of a national newspaper: “[Is India an] economic powerhouse or nutritional weakling?”<sup>4</sup>. The author of the article, Lawrence Haddad, has edited a major report of the Institute of Development Studies, University of Sussex, UK, titled “Lifting the Curse: Overcoming Persistent Undernutrition in India”<sup>5</sup> with several scientists contributing from India. India’s celebrated macroeconomic growth must equitably benefit all sections of society and undernutrition and overnutrition ought to be addressed not only as health but also as developmental issues.

The nutrition-related metabolic disorders lead to risk factors of obesity, diabetes mellitus, cardiovascular and neurovascular catastrophes and chronic renal failure. Together these are referred to as ‘lifestyle’ and

‘non communicable’ diseases. These are indeed multifactorial in origin, with genetic, epigenetic, socio-cultural-behavioural, environmental and nutritional elements acting adversely in different combinations. The ICMR-CIHR workshop on obesity addressed four areas: epidemiologic transition and its consequences; early origins of obesity; the obesogenic environment during childhood and adolescence; and public health interventions to tackle the obesity epidemic. Our focus in this editorial is the last item, namely public health interventions, and we ask the question: who is, and who should be, in charge of an integrated national public health programme to address technical and management modalities for nutrition security and for prevention and mitigation of the ill effects of lifestyle diseases? We believe that the Government of India (GoI) has an imperative responsibility and a timely opportunity to design an overarching governance system to address nutrition security as well as lifestyle diseases.

Nutrition security implies physical, economic and social access to balanced diet and microbiologically and chemically clean drinking water. There is nexus between disease-free environment and nutrition security, often forgotten. Many infectious diseases result in catabolic loss of nutrients and also in economic loss leading to reduced purchasing power. Thus safe environment, public health prevention of transmission of faecal and vector-borne pathogens and equitable health care (preventive and curative) are also elements promoting nutrition security for every individual. Education and empowerment are needed for the community to utilise these services.

The INSA symposium covered a wide range of issues: the double-burden of large-scale undernutrition and rising incidence of overnutrition; the conceptualization and establishment of Nutrition Security (apart from food security); gender-related

issues of nutrition and health; need for awareness creation at governmental levels (policy makers, planners), down to citizens levels (professionals and people in general); integrating current governmental policies and programmes with a bearing on nutrition security; and the way forward. The conclusions of the symposium included the following:

- (i) Malnutrition is a silent emergency demanding immediate attention for India to have inclusive and equitable growth and development.
- (ii) Food Security Act (under consideration in Parliament), even when approved and implemented, will not necessarily eliminate malnutrition.
- (iii) Nutrition should be the centrepiece of development and not a trickle down benefit of economic and industrial growth. That strategy has failed.
- (iv) Agricultural cropping pattern should be diversified and nutrition-oriented to ensure macronutrients as well as micronutrients at household and individual level – in addition to adequacy of calories. This should be the first priority instead of augmentation of income through export of agricultural produce.
- (v) Large segments of undernourished population escape targeted public distribution service (PDS), which needs re-design with broadening of both coverage and ‘basket’ of commodities.
- (vi) Attention to female health and empowerment, appropriate infant and child feeding practices and assured food availability, and recognition and prevention of micronutrient deficiencies are to be ensured.
- (vii) India needs a Nutrition Security Act as an overarching mechanism to bring about convergence of different missions and programmes run vertically by different departments/ministries. Piecemeal efforts, namely formulation of a National Nutrition Policy (1993) and a National Nutrition Plan of Action (1995) by the Ministry of Women and Child Development (WCD); the creation of a National Nutrition Mission (2001) by the GoI; and nutrition-specific recommendations of 10<sup>th</sup> and 11<sup>th</sup> 5-Yr Plans have all remained ineffective for achieving nutrition security, for want of such a mechanism.

The three reports listed above generally agree on the urgent need to address nutrition security and human health. India is no longer a ‘poor’ country that

cannot afford to invest in nutrition security as well as health security<sup>6</sup>. However, India does not have a national level mechanism or programme to integrate all necessary interventions for optimum nutrition for good health. This deficiency has to be corrected urgently and imaginatively.

The Department of WCD was created to ensure nutrition support for the two vulnerable groups but its mission has so far not succeeded. There is no simple solution to the problems of Nutrition Security, but multiple co-ordinated interventions are needed. The existing GoI systems are insufficient by themselves to address and remedy all of the gaps described above and there should be better ownership and accountability vested in one agency that brings in close collaboration among several Ministries – Health and Family Welfare (H&FW), Agriculture, Food Processing, Education, WCD, Rural Development, Finance, Industry, *etc.* Even the focus of National Rural Health Mission is communicable and non communicable diseases, forgetting the critical need for optimum nutrition to address them. Malnutrition is indeed the worst form of non communicable disease in India. The Symposium participants discussed several options for the GoI to implement the provisions of the proposed Nutrition Security Act. One option was a Committee under the Prime Minister or another senior minister to monitor and direct the performance of all relevant ministries and departments that would directly or indirectly influence Nutrition Security. Other options included a separate Ministry of Nutrition Security or a separate Department under the existing Ministry of H&FW that would co-ordinate the relevant elements of various ministries and departments.

In summary, we believe that an innovative re-design of the health system is necessary to address proactively and reactively the cross-cutting issues of nutrition and health. These include (i) the health of mothers and children; (ii) the nexus between nutrition and infectious diseases; (iii) the role of nutrition of girl children in future pregnancy; (iv) intrauterine growth of foetus and post-natal risk of obesity in the offspring; (v) high prevalence of anaemia among girls and women; (vi) rampant malnutrition including micronutrient deficiencies; (vii) health and nutrition education of government planners, policy makers, technocrats, bureaucrats, educationists and the public; (viii) inclusion of appropriate curriculum in general and professional (health, agriculture) education; (ix) the promotion of cultivation of nutrition-supporting

crops; and (x) integrated post-harvest technology and relevant research to impact upon all of the above. The critical importance of physical activity in preventing or mitigating the effects of obesity and other lifestyle morbidities is well known. Town planning ought to ensure sufficient 'lung space', adequate provision of places for walking and exercise without inhaling automobile exhaust, and proper play grounds in all schools for improving physical fitness. Although these may appear trivial, but are truly vital as interventions against lifestyle diseases.

India also needs a robust mechanism of nutrition monitoring and surveillance to forewarn any adverse shifts in nutrition and lifestyle disease epidemiologies, and to monitor progress of the effects of all interventions, as part of the GoI agency for Nutrition Security. We do not wish to be prescriptive, but we present the urgent need to address holistically Nutrition Security and Health Security. The GoI may well begin by establishing a National Commission on the Health System to address the above issues as well as other neglected elements in public health<sup>6</sup> – so that our health system can be re-engineered to face a broad set of public health issues - of both communicable and non communicable diseases including nutrition security.

The first Commission to address the design of India's health system after independence was established in 1959 under AL Mudaliar. It is high time for a revisit of the entire health system. While we highlight the deficiencies on the nutrition front, others<sup>6-8</sup> have drawn attention of the GoI to the urgent need to establish a Public Health sub-system within the health system in order to integrate all vertical single-disease control programmes and to broaden the spectrum of control targets, to comprehensively evaluate and re-invigorate the failing control of tuberculosis, urgently re-engineer

the faltering Universal Immunization Programme and to design interventions to face the rising trends of lifestyle diseases. Thus, national consensus-building through detailed review, analysis, discussion, debate and synthesis is needed, for which a National Commission will be essential.

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