

The Hidden Hunger

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Pediatricians have becoming familiar not very infrequently with the scenario that an apparently healthy child being tested for a complete blood count for other clinical conditions showing moderate to very low Hb% level, later diagnosed due to Iron deficiency. When the fact is exposed the parents reacts with an exclamation because of their statement have been offering very nutritious foods (e.g. meats, eggs, polao/biriany, very costly items from luxury restaurants and JUNC foods etc) to their kids, then nutritional anemia occurred. This is one of the very common examples of Hidden Hunger in mid-income groups. The cause of this condition in the children belongs to low income group is obvious.

The children who are not growing and as well as not developing well, are the victims of apparently silent but steadily progressing, of the three strands of the triple burden of Malnutrition that is rapidly emerging in communities around the world. Globally almost 200 hundred million children under 5 suffer from stunting, wasting, or both and at least 340 million from hidden hunger of vitamin and mineral deficiencies. At the same time, 40 million children under 5 are overweight and the toll from overweight and obesity keeps rising, even in lower-income countries. These patterns reflect a profound triple burden of malnutrition that threatens the survival, growth and development children and nations.¹

Hidden Hunger describes a state of deficiency in humans of essential vitamins and minerals (referred to collectively as micronutrients) that occurs largely without signs & symptoms of micronutrient deficiency disease. There is a long history of discovery of essential vitamins and minerals, and considerable success has been made in the related classic deficiency disorders (e.g. rickets, scurvy and anemia).² Micronutrient deficiencies affect an estimated two billion people, or almost one-third of the world's population³. Iodine, Fe, vitamin A and Zn deficiencies are the four micronutrient deficiencies of greatest public health concern globally due to their high prevalence and associated health and development consequences. Roughly one-third of children aged 6-59 months (Children under 5 years) in low- and middle-income countries suffer from vitamin A deficiency (VAD)⁴ and 18% of children under 5 years have Fe-deficiency anemia.⁵ Similarly, 30% of people worldwide suffer from insufficient Iodine intake⁶, and 17% from inadequate Zn intake⁷. Certainly an overlap remains across such deficiencies at both individual and

population levels and the full magnitude of the problems are documented poorly, the Hidden Hunger remains a global challenge. Micronutrient deficiencies during pregnancy lead to higher maternal mortality and morbidity, neural defects of the newborns. These deficiencies have also a strong impact on prematurity, low birth weight and impaired cognitive development in newborns. In infancy and early childhood hidden hunger is the significant cause of poor growth and development, poor immunity and tissue development and poor health with increase risk of death.

Now the, COVID-19 pandemic has deteriorated the key determinants of health and upheavals around the world. Children, although less directly affected by the virus, are paying a heavy price through the indirect effects of the crisis, including poor diet, mental health impact, social isolation, addiction to screens and lack of schooling and health care, particularly among vulnerable groups. This crisis has public health implications that could have life-long consequences on children. The impact of nutrition and lifestyle is one of the submerged parts of the iceberg with potential intergenerational consequences.⁸ Micronutrient deficiencies are widespread. The effective prevention of this Hidden Hunger proper maternal and infant & young child feeding practice should have to be ensured. World Health Organization (WHO) recommends point-of-use fortification of foods with multiple micronutrient powders consumed by 6-23 months of children. The messages include, improve nutritional status of pregnant woman using supplements, practice delayed cord clamping, and encourage exclusive breast feeding with supplementation of lactating mother, and supplement children by programmatic vitamin A, Iron-Folic acid and Zinc.⁹ Other measures are to control of infectious diseases, De-worming, dietary diversifications, avoidance of JUNC (J-junk, U-ultra-processed, N-non-nutritious, C-carbonated) beverages foods, and use of staple food fortification (e.g. iodized salt, flour, sugar, oils) and fortified complementary foods. Knowledge about Hidden Hunger helps to detect, prevent, and treat this avoidable condition and improve the health and prosperity of the next generation.

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