

Making Stunting a Development Indicator

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At the 2012 World Economic Forum (WEF) in Davos, Dr David Nabarro – now Special Adviser on the 2030 Agenda for Sustainable Development – was presented with the inaugural *Sight and Life* Nutrition Leadership Award on behalf of the Scaling Up Nutrition (SUN) Movement. Accepting the award, Dr Nabarro stated that “Nutrition on its own should become a new development goal as we look beyond 2015.” The word “development” is significant here. Dr Nabarro was looking forward to the coming era of the Sustainable Development Goals (SDGs). Indeed, nutrition has an important place within the overall framework of the SDGs, with a central role in Goal 2 (Zero Hunger). We have even gone further and put **nutrition** at the heart of achieving all 17 SDGs,¹ but in the widest definition of the word – not in the narrow sense in which many define it.

Stunting: the universal nutrition target

In recent years, stunting (low height for age, linear growth failure, <-2 SD of the WHO Child Growth Standards median) has come to be seen as the universal nutrition target (in addition to anemia, low birth weight, exclusive breastfeeding, and wasting). A stunting target was initially endorsed by the 2012 World Health Assembly (WHA) and is now also anchored in Sustainable Development Goal (SDG) 2 – probably for its importance during the first 1,000 days of life and its lifelong influence on health and prosperity. In an earlier commentary in *Sight and Life*, **The stunting enigma**,² I quoted the president of the World Bank Group, Jim Yong Kim, as observing that: “This [stunting] is the face of poverty.”

For me, this is *the* most powerful description of the tragedy of stunting. It acknowledges the multifactorial etiology of stunting (chronic malnutrition), as was so aptly illustrated in the UNICEF conceptual framework by the late Urban Jonsson (to whom we pay tribute in an obituary in this issue). Studies in The Gambia³ have

shown that > 40% of stunting can be attributed to environmental enteric dysfunction (EED) – i.e., chronic exposure to pathogenic bacteria, viruses, and parasites due to poor hygiene, contaminated water and open defecation causing epithelial atrophy, malabsorption and inflammation. As a consequence, nutrients are lost and diverted to immune responses rather than to growth. Moreover, in a recent publication we demonstrated (applying a sophisticated metabolomics platform) that all nine essential amino acids were significantly lower in stunted children than in non-stunted children.⁴ You might think such a result predictable, but there has in fact been a lack of interest in protein (research) on the part of the nutrition community since the mid-1970s. This was the direct consequence of Donald McLaren’s influential commentary in *The Lancet*, “The Great Protein Fiasco,” that led to a flurry of micronutrient research, with protein left out in the cold.⁵ As a result of the recent publication, Richard Semba and I posed the question in a Huffington Post blog, “Have we been hooked on micronutrients in our search for the solution to stunting?” We believe that over the last decades we have neglected the importance of good-quality protein and other nutrients essential for growth.⁶

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The accelerant of a good start in life

Roger Thurow writes in his new book *The First 1,000 Days*⁷ that “Good Nutrition is the indispensable fuel of growth and development, particularly in the 1,000 days; it is the accelerant of a good start in life.” Thurow goes on: “They [The Lancet series] concluded that if the world was to launch an effective assault on stunting, it would need to attack the problem along a wide front stretching across multiple sectors of development – agriculture,



Ricardo
7 years old

Manuel
7 years old



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nutrition, health care, water, sanitation, education, communications and behavior change.”

This view is underlined by the authors of the most recent issue of the *European Journal of Clinical Nutrition*.⁸ This special issue, which is edited by Guest Editor and leading auxologist Prof. Michael Hermanussen from Kiel University in Germany, points out that: “Growth and height have been within the focus of medical research for many centuries and are included in the political agenda of the WHO and UNICEF, as they are measures of *poverty, chronic illness* and malnutrition”. Fascinatingly, Prof. Hermanussen argues that: “Evidence that body height is determined by socioeconomic circumstances can be traced back to Louis René Villermé (1782–1863), a French hygienist who used data collected by the military services of the French army in 1812 and 1813, and the report to the Minister of War in 1817.” *Plus ça change, plus c’est la même chose* – if only we would pay full attention to the evidence before our eyes.

Speaking of important recent publications, the Maternal and Child Nutrition supplement “Stop Stunting in South Asia. Improving Child Feeding, Women’s Nutrition and Household Sanitation,”⁹ could not have been timelier, too. In its accompanying editorial by Victor Aguayo (UNICEF) and Purnima Menon (IFPRI), Shawn Baker of the Bill & Melinda Gates Foundation is quoted as saying, “It will be essential to define the roles and responsibilities of each sector in reducing child stunting and, importantly, to co-locate the interventions of all sectors.”

I can only concur with Baker, but I have a burning question: Who is going to coordinate this multi-sectoral approach to eradicating the glaring injustice of stunting? Will it be Nutrition? Health? Agriculture? Education? Or possibly even the infrastructure sector? Who will be held accountable, and how?

“Who is going to coordinate this multi-sectoral approach to eradicating the glaring injustice of stunting?”

The nutrition community is clearly interested in reducing stunting, but what interest has the infrastructure sector in investing in improved water and sanitation *with reduced stunting as an outcome*? The SUN Movement clearly supports the national implementation of cross-sectoral teams, but there is still a significant functional and technical capacity gap at different levels within governments, NGOs, businesses, and academia. Who will take the lead and invest in creating these capabilities? Transformational leadership skills to forge effective teams – the type of “soft skills” taught by the African Nutrition Leadership Programme¹⁰ – are lacking, and are an expensive investment with a long-horizon return. It isn’t a quick fix!

The stakes are high. We **must** make good progress in stunting reduction. Nutrition has never been higher on the development agenda, and it will not get a second chance. Yet the reality, according to the 2013 *Lancet* series, is that stunting can only be reduced by about 20% through applying, at scale, the 10 evidence-informed nutrition-specific interventions.¹¹ The other 80% of the problem is barely under the control or influence of nutrition.

I fully support tracking stunting as a development – **not nutrition** – indicator. It accumulates all the insults that can occur during a child’s development, determining the child’s health and a country’s health and economic wellbeing. Such an approach would, I believe, raise levels of accountability within governments, and thus would more effectively facilitate the multi-sectoral approach that is so essential for success. History teaches us that the Nutrition sector has traditionally lacked a real home, being always prone to fall between the cracks of Agriculture and Health. Little has changed. We must move stunting out of Nutrition and establish an accountability framework across sectors and stakeholders that really works to the benefit of the children, their families and countries. If we do not, then history will repeat itself, with tragic consequences.

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