Nutrition interventions need improved operational capacity

The Lancet’s Child Survival Series was a galvanising manifesto: it focused action plans to improve the wellbeing of children worldwide. However, the authors did not address in detail the importance of nutrition in child survival, and thus the current Undernutrition Series was born. This welcome new Series focuses on micronutrient interventions and stunting as manifestations of a poor diet, and comprehensively catalogues the topic from a multiplicity of datasets and viewpoints.

Undernutrition results from a complex web of interactions, from the molecular and microbiological level of the individual to the cultural and socioeconomic characteristics of societies. The intricacy of undernutrition as a global problem seems to defy simple, directed, and uniform programmes. However, we will not effectively improve child survival unless we untangle this web, because over 50% of child deaths result from undernutrition.

Working in southern Africa, we are convinced the key will be to translate the understanding of undernutrition into practical interventions. We are faced with an overwhelming burden of HIV, and the treatment of seriously ill children with chronic infections leading to undernourishment is challenging. Old guidelines do not suffice because the clinical presentation, pathophysiology, and prognosis have changed because of HIV. Additionally, further investigation of the clinical and pathophysiological complexities and treatment of malnourished children with HIV in the context of health systems is needed if interventions are to be effective.

Two large-scale interventions in South African services have influenced international policies. First, a strong child-health system that supports exclusive breastfeeding in HIV-infected women can increase the survival of infants exposed to and infected with HIV. Second, community-based management of uncomplicated severe malnutrition without HIV infection, which was for years treated in facilities according to the WHO standard protocol, has dramatically improved recovery rates that were formerly almost equivalent to case-fatality rates. Many of the factors that the authors of the Undernutrition Series identify conspired to create this failure in treatment: the lack of doctors and nurses to administer care; use of foods that were easily contaminated; overcrowded and understaffed hospitals; the absence of accessible early interventions in vulnerable communities; and the lack of coherent and adequately funded national strategies. Community-based care with ready-to-use therapeutic food for children with uncomplicated severe malnutrition has transformed understaffed child-health services. Home-based therapy with locally developed scientific breakthroughs, new-found resources, political resolve, and moral indignation—can work in cohort. Together, we can make major advances in short periods of time if we give the challenge of hunger the priority it deserves.

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I declare that I have no conflict of interest.

and produced therapeutic diets\(^1\) has resulted in recovery rates of over 90%.\(^1\) Within 5 years, carefully designed clinical trials\(^2\) were followed by operational projects that were scaled up to create an effective national programme in Malawi.

Populations in which undernutrition and HIV are rampant, such as in much of sub-Saharan Africa, must integrate nutritional support and HIV care because of the synergy between the two. In sub-Saharan Africa the potential impact of nutritional interventions is large, as long as adequate human resources are available\(^3\) and local health professionals are empowered. We agree with Jennifer Bryce and colleagues\(^4\) that there will be no “magic bullets” to solve undernutrition and that the building of strategic and operational capacities\(^5\) is imperative. These authors argue that “weakest of all” is the capacity for training and that there is “a lack of respect for locally generated solutions”. With increasing funds available to improve child survival in our region, for example, ownership becomes an essential element for success. Strengthening local health systems in their capacity to implement and audit interventions is more important than donor-dominated and constantly changing monitoring systems and donor-driven workshops that distract local staff from their already eroded health services to children.\(^6\) A change in approach to nutrition interventions, both in focus and in locus, is needed so that we are no longer requested to implement interventions but to locally develop interventions and audit their contribution to child survival. The funding and capacity of higher education institutions in Africa to initiate and maintain leadership in child health is inadequate—the priority should be to strengthen these institutions, rather than to add more externally driven child-health initiatives. Presenting, funding, and implementing the findings and recommendations of the Child Survival and the Undernutrition series in African institutions would be a good start.

We must move beyond “more studies and more data”,\(^7\) and enter the realm of effectiveness and operational research. Let us start with our goal of child survival and work backwards and learn by doing.\(^8\) Such an initiative requires a shift in current thinking about nutrition and health, a shift that is urgently needed to address the ill-health aspects of undernutrition in southern Africa. The Lancet’s Undernutrition Series provides valuable knowledge, mostly based on trials. However, to scale-up nutritional interventions, we need a knowledge base on the necessary support and institutional capacity that enables these interventions to work and improve child survival. Child-health professionals in southern Africa are prepared and waiting to move ahead.

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