

Addressing Capacity Challenges

Breaking down silos in the nutrition community

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Key messages

- > Nutrition is a multi-temporal, multi-faceted, multi-sectoral, multi-disciplinary issue, and there are many forms of malnutrition that plague society.
- > In this trans-disciplinary space, nutrition professionals need to be fluent in discussing the concepts and constructs of other disciplines.
- > Four challenges need to be dealt with in the near future:
 1. We are trained to understand only our field of discipline, and those disciplines in and of themselves are complex.
 2. We are not trained to think about other sectors or even more so, other systems.
 3. We are not trained to think about how to work differently and in what timescale.
 4. The nutrition community has its own silos and divisions that rarely cross paths.
- > It is essential to jointly bridge the divides within the nutrition communities in order to answer complex challenges in order to address malnutrition in all its forms.

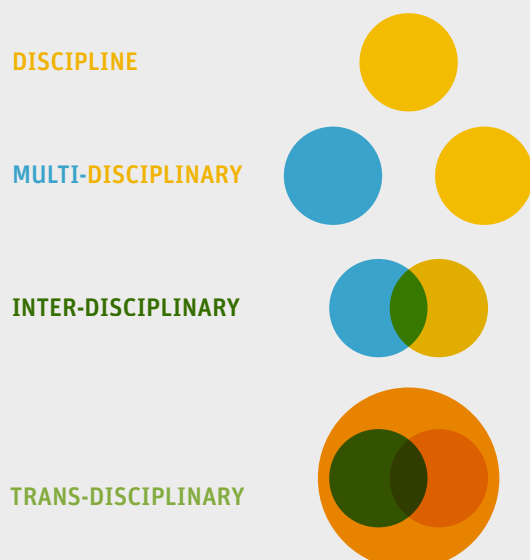
The challenge of building capacity

Nutrition is a multi-temporal, multi-faceted, multi-sectoral, multi-disciplinary issue. While the 1991 UNICEF framework on the causes and consequences of malnutrition demonstrates just that, one is left questioning how to build capacity to address the multiplicitous nature of nutrition.¹ We also know that nutrition

is complex: there are many forms of malnutrition that plague society, including undernutrition in the form of stunting and wasting, micronutrient deficiencies and overweight and obesity and diet-related noncommunicable diseases. Each of these manifestations is biologically complex, with a range of contributing factors and outcomes on health and well-being.

There have been many calls about working across disciplines and building cadres of workforce that can take on the complexity of malnutrition. In this transdisciplinary space, nutrition professionals need to be fluent in discussing the concepts and constructs of other disciplines to effectively engage with decision-makers in other sectors and seize opportunities to influence policies and programs.² Alas, many individuals instead train in specialized, niche areas. Why is that? First, it is just plain easier to work within a sector or a discipline. Second, inter-, multi- or trans-disciplinary working requires effort – understanding new terminologies, new ways of working, new methods, new approaches and new evidence to unpack. This way of working calls for commitment, time and resources, all of which are scarce (**Figure 1**).

FIGURE 1: Inter-, multi- and trans-disciplinary work





The nutrition community needs to find new ways of understanding the challenges we all face

Malnutrition in LMICs

While every country has some type of malnutrition, low- and middle-income countries (LMICs) struggle with significant double or triple burdens of malnutrition – reeling from undernutrition, micronutrient deficiencies and overweight and obesity. There is a real dearth of nutrition capacity in LMICs, and Delisle and others have described the many factors that contribute to this scarcity of nutrition professionals, particularly in the public health sector.³ They, too, call for building capacity and integrating nutrition tasks into other disciplines. Specifically, they call for capacity in non-health sectors such as agriculture and education, because many of the underlying causes of malnutrition are in those sectors. Even those trained in nutrition within public health need to understand more than just the biological mechanisms and causes of malnutrition and to learn soft skills on how to be leaders and facilitate working relationships.⁴ Fanzo and coauthors (2015) suggested that a workforce in nutrition should look more like teams – those that are working multi- or transsectorally, that have leadership, advocacy and communication skills and can think outside the box to future challenges that will impact nutrition, such as climate change, geopolitics and demographics.²

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**“Any workforce in nutrition
 needs to think outside the box”**

Four critical challenges to master

When we think about training across temporal, sectoral, disciplinary and faceted scales, there are four challenges that come to mind that we, the nutrition community, need to deal with in the near future. First, we are trained to understand only our field of discipline, and those disciplines in and of themselves are complex. For example, a public health epidemiologist would struggle to understand the science of a climatologist. Why? Because these specialists come from different schools of thought, learn different methodologies and indicators to measure their work and use different analyses and systems science approaches. Each discipline and subdiscipline has a nose-dive approach to their work that makes it incredibly hard for others in distinct disciplines to understand. However, these disciplines impact each other, and illustrated next is one example where these two disciplines are coming together and are important to understand. Climate scientists (and in this case, a medical doctor doing climate work) are now elucidating the impact of different climate-change scenarios on the nutritional quality of crops. Authors estimate that in high CO₂ conditions, an additional 175 million people will be zinc-deficient, and an additional 122 million people will be protein-deficient. This has significant repercussions on the advancements made in public health nutrition to address micronutrient deficiencies.⁵ It is important for those working in nutrition to understand the findings stemming from their research and how that will impact the work they are doing to promote nutritious foods. **It is also important for climate**



Palm oil fruits following harvesting. The Ebola crisis had repercussions for palm oil growers in Liberia.

scientists to consider the consequences of their findings together with nutrition colleagues and to delve deeper into the causes with implications for other nutrients and crops.

Second, we are not trained to think about other sectors or even more so, other systems. Public health specialists work within health systems. Agriculturalists work within food systems. And never the twain shall cross. However, we know that they do cross, interact and feed back on each other. A blow to one system can impact another system. Ebola is one such example that comes to mind, in which a massive hit or shock to the health system had repercussions on the food system and in this case on the major cash crop – palm oil – in Liberia. The 2014 Ebola virus disease outbreak caused a significant decrease in economic activity and jobs in all of Liberia, and an especially large decline in the capital, Monrovia, due to border closures, quarantines and other restrictions that caused disorder. At the height of these restrictions, the outbreak led to disruption in the marketing of goods, including agricultural commodities. In Liberia, because of the quarantine and restricted movement, work on the palm fields halted, leading to a destruction of cash crops.⁶ **Thus, there is a need for those working in nutrition to understand systems thinking and how other systems within which they do not work impact their own systems work.**

Third, we are not trained to think about how to work differently and in what timescale. In nutrition, there are divisions between those that work on humanitarian or emergency nutrition issues in shorter timescales versus those who work on longer-term nutrition development challenges. Again, these communities do not talk to each other or, what is more important, work together. Their respective indicators, surveillance systems and ways of working are completely different. The World Humanitarian Summit in Istanbul in 2016 highlighted the need to “strengthen linkages between humanitarian and development programming”

because many of the humanitarian programs take place in contexts of protracted emergencies in which a short-term response is not always the best approach. The UN Office for Coordinating Humanitarian Affairs (OCHA) developed a framework that calls for joined-up analysis of acute and long-term needs, joint humanitarian and development partner planning with collective outcomes, joint leadership and coordination building on opportunities and comparative advantage, and financing modalities to support collective outcomes.⁷ **It is important for these communities to come together through joint planning to help prevent and mitigate costly, devastating humanitarian situations in the next decade. This is particularly timely with climate change effects on the planet.**

Fourth, we have other divisions in the nutrition world. Those who work on undernutrition and those who work on overweight and obesity. Their respective rationales, interventions and communities are distinct. This is unfortunate because of what is now being termed ‘double-duty actions.’ Double-duty actions include interventions, programs and policies that have the potential to simultaneously reduce the risk or burden of both undernutrition and overweight and obesity.⁸ This can be done on the one hand by retrofitting existing nutrition actions to address or improve new or other forms of malnutrition and on the other through the development of *de novo*, integrated actions aimed at the double burden of malnutrition. One example of this would be the promotion of exclusive breastfeeding to address both undernutrition and overweight and obesity in later life.⁹ Not only does breastmilk provide nutritional benefits for the child in protecting against undernutrition, it can also reduce the risk for overweight and obesity later in life, as well as regulate maternal weight gain. **It is important for the nutrition communities to consider the platforms and interventions in which they carry out their work to determine if they are having double- or even triple-duty impacts.**

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“It is about together bridging the divides within the nutrition communities in order to answer complex challenges that overlap and impact each other”

Thus, it is not just a question of our working trans-sectorally. It also requires us to think about the implications of our work in other systems, and what actions could serve more than one purpose. It is about delving into new communities and reading new literature and going to conferences that are unfamiliar. It is about jointly bridging the divides within the nutrition commu-



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nities in order to answer complex challenges that overlap and impact each other. It is about creating open spaces, not walls. But we need a different type of workforce for nutrition, and there have been many papers elucidating the means to get there. Ways to create this new type of workforce would be to create a consortium to link universities of the global North and global South, online training modules for middle managers and practical, hands-on experiences for frontline nutrition workers.^{2,4,10}

What are the incentives to think wider and broader, and to reach across the aisle and get to know our neighbor? I can think of four reasons.

First, the work you do will have a bigger impact. Second, the work you do will be more interesting. Third, your networks grow. And last, we no longer have a choice: nutrition requires disciplines, sectors and systems engaging, collaborating and partnering in impactful ways.

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