

Implementation Science in the Field of Nutrition: Why Is It So Relevant?

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During the past decade the global nutrition community—including policy makers, academicians, international organizations, and other key stakeholders—has strongly called attention to the need that policy makers have to receive guidance on how best to implement evidence-based large-scale cost-effective nutrition programs in the highly complex and dynamic “real world” (1–3). Meeting this need is considered crucial for each country’s ability to achieve the UN’s Sustainable Development Goals (4) and hence to protect and improve the nutritional status, health, and wellbeing of vulnerable populations globally (1). Unfortunately, this demand has not been met, in large part because the effort requires application of complex principles and methods from the emerging area of implementation science, and until recently, there have been few high-quality journals where this type of research could be published in the field of nutrition.

For these reasons, since its inception the editorial leadership of *Current Developments in Nutrition* (CDN) set as a high priority stimulating the submission of high-quality research studies involving implementation science. As a start CDN commissioned the recently formed Society for Implementation Science in Nutrition (5) to develop a conceptual article that could help our readership understand how this nascent field is defined, which type of research questions it can help answer, and which methods are available to do so. This is why the special article on implementation science in the field of nutrition published in this issue of CDN on behalf of the Society for Implementation Science in Nutrition (6) represents a true milestone for our journal and we believe for the area of global nutrition as a whole.

In this article implementation science is defined as “an interdisciplinary body of theory, knowledge, frameworks, tools and approaches whose purpose is to strengthen implementation quality and impact” (6). Furthermore, implementation research methods are described as:

a variety of methods of assessment, inquiry and formal research whose purpose is to systematically assess, build on strengths and address potential weaknesses within and between each of the five domains that affect implementation [objectives of implementation; implementation organizations and staff; enabling environments; individuals, households and communities; implementation processes] (6).

Most importantly the article provides 3 case studies to specifically illustrate how these principles can be applied in the area of implementation science. The first case study, based on the inclusion of micronutrient powders in the national nutrition strategy of Mozambique, illustrates the application of implementation research to support policy development and translation into program design and implementation. The second case study, based on the inclusion of micronutrient powders and Infant and Young Child Feeding counseling in Bangladesh, documents the application of implementation science principles to identify relevant questions and ways to answer them to anticipate and address implementation challenges, and make programmatic recommendations that are likely to be feasible and acceptable to program implementers. The third case study documents how long-term investments in implementation research helped to strengthen program design and implementation on a large scale, in PROSPERA, which is considered to be one of the most effective conditional cash transfer programs globally.

The implementation science principles clearly explained in this article combined with the well-developed and documented case studies illustrate why it is so important to invest more in



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Manuscript received October 25, 2018. Revision accepted October 29, 2018. Published online October 31, 2018.

The authors reported no funding received for this commentary.

Author disclosures: RP-E is currently funded with grants from the NIH, the Bill & Melinda Gates Foundation, the Family Larsson-Rosenquist Foundation, the Kellogg Foundation, and the US Agency for International Development. JO is currently funded with grants from the USDA-National Institute of Food and Agriculture, USDA-Animal Health, the North Carolina Agricultural Research Service, and Matatu, Inc.

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the development of implementation research methods in the context of complex adaptive systems frameworks given the high degree of intersectoriality and multilevel coordination that is needed for food and nutrition programs to be affordable and to work effectively on a large scale (7). Witnessing and being a part of the emergence of a new vista for nutrition science that promises to facilitate the translation of knowledge into evidence-informed policies and programs in our field to the benefit of humankind is truly exciting. Therefore, we enthusiastically invite the whole CDN readership and nutritional sciences community at large to read this article. Lastly, we strongly encourage those conducting research involving nutrition implementation science study designs or methods development to consider submitting their best implementation science papers to our journal.

Acknowledgments

The authors' responsibilities were as follows—Rafael Pérez-Escamilla wrote the first draft of article. Both authors revised the paper and read and approved the final manuscript.

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