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Article

Impact Evaluation of An Interdisciplinary Educational Intervention to Health Professionals for the Treatment of Mild to Moderate Child Malnutrition in Mexico: A Difference-in-Differences Analysis



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Abstract

The prevalence of undernutrition in Mexican children younger than 5 years old has been 14% since 2006. There are clinical practice guidelines for mild to moderate malnutrition in children in the Mexican health system; however, they are not applied. In addition, the knowledge and practices of health professionals (HP) to treat malnutrition in health centers are insufficient to perform adequate assessments and correct treatments. An impact evaluation of an interdisciplinary educational intervention was carried out on 78 HPs for the treatment of children with mild to moderate malnutrition of low resources, with 39 in the intervention group and 37 in the counterfactual group, estimated as the comparison group. A Food and Agriculture Organization (FAO)-validated questionnaire adapted to child malnutrition about knowledge, attitudes, and practices was applied before, after, and 2 months after a malnutrition workshop. The difference-in-differences analysis showed that the educational intervention group had a significant improvement in knowledge, attitudes, and practices before and after the intervention (grades of 54.6 to 79.2 respectively, p = 0.0001), compared with the comparison group (grades of 79.2 and 53.4, respectively, p = 0.0001), which was maintained over two months (grades of 71.8 versus 49.8, p = 0.0001, respectively). The multivariate analysis showed that the probability of improvement in learning by 30% was 95-fold higher in the educational intervention group versus the comparison group, OR = 95.1 (95% CI 14.9–603.0), and this factor was independent of sex, age, education, or hospital position. Despite the availability of clinical practice guidelines for the assessment and treatment for child malnutrition, education in malnutrition for HPs is effective and needed to achieve a significant improvement in children's health.

Biography

Sonia Sánchez-Encalada has a degree in Nutrition and Food Sciences from the Universidad Iberoamericana Campus Sta. Fe, México city (Professional ID No. 3274571). She carried out neuroscience research at the Institute of Biotechnology at the UNAM in Cuernavaca Morelos, obtaining mention and publication of her undergraduate thesis work "Intracellular pathways of pyroglutamyl peptidase II in anterior pituitary cell cultures." She obtained the degree of Master of Science in Clinical Epidemiology from UNAM (Professional Certificate No. 11273681) with an honorable mention of the work entitled "An Educational Intervention to Mothers Improved the Nutritional Status of Mexican Children Younger Than 5 Years Old With Mild to Moderate Malnutrition". She is a professor at the University of the Americas in Mexico City and Head of Graduate Studies at the School of Advanced Health Studies at La Salle University. She has three scientific publications and is a PhD candidate in Sociomedical Sciences in the area of Health Management and Policies from UNAM with the project "Impact Evaluation of An Interdisciplinary Educational Intervention to Health Professionals for the Treatment of Mild to Moderate Child Malnutrition in Mexico: A Difference -in-Differences Analysis".



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About Research Topic

Eliminating all forms of malnutrition, such as children acute malnutrition and stunting, is one of the Millennium Development Goals, in addition to reducing poverty, and child mortality. The global Nutrition Report 2020, the World Health Organization (WHO) and the Pan American Health Organization (PAHO) have reported that the promotion of a good nutrition plays a fundamental role at all levels of health care, especially in primary care emphasizing in a healthy lifestyle at any age to reduce the incidence of diseases. However, it has been reported that some health professionals practices such as early detection and treatment of child malnutrition in health care services are still insufficient, which has a negative impact on children´s health. A correct health professionals education of mild to moderate child malnutrition is essential to detect and treat opportunely wasted and stunted patients in Mexico.

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