



**Review article**

# **Partnership of the Sociedade Brasileira de Oncologia Pediátrica and International Society of Pediatric Oncology to improve nutritional care for children with cancer in Brazil**



**Karina Viani<sup>a,\*</sup>, Vicente Odore Filho<sup>a</sup>, Sima Ferman<sup>b</sup>, Teresa Cristina Cardoso Fonseca<sup>c</sup>, Vanessa da Cunha Oliveira<sup>a</sup>, Priscila dos Santos Maia Lemos<sup>d</sup>, Ronald D. Barr<sup>e</sup>, Elena J. Ladas<sup>f</sup>**

<sup>a</sup> Universidade de São Paulo (USP), São Paulo, SP, Brazil

<sup>b</sup> Instituto Nacional de Câncer (INCA), Rio de Janeiro, RJ, Brazil

<sup>c</sup> Universidade Estadual de Santa Cruz (UESC), Ilhéus, BA, Brazil

<sup>d</sup> Universidade Federal de São Paulo (Unifesp), São Paulo, SP, Brazil

<sup>e</sup> McMaster Children's Hospital, Hamilton, Ontario, Canada

<sup>f</sup> Columbia University Medical Center, New York, USA

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**ABSTRACT**

The authors present a proposal of a partnership between the Sociedade Brasileira de Oncologia Pediátrica (SOBOPE) and the International Society of Pediatric Oncology (SIOP) to promote the standardization and improvement of nutritional care of kids under cancer treatment in Brazil. The results of the first meeting in Brazil as well as plans for future meetings are described.

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\* Corresponding author at: Instituto da Criança, Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo (ICr/HCFMUSP), 148 Rua Galeno de Almeida, 01409-001 São Paulo, SP, Brazil.

E-mail address: [viani.karina@gmail.com](mailto:viani.karina@gmail.com) (K. Viani).

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## Background

In comparison to many low- and middle-income countries, significant advances in the treatment of childhood cancer have been obtained in Brazil. A significant number of the children receive treatment using modern protocols. Additionally, hematopoietic stem cell transplantation is available in several urban centers throughout the country. With increased availability of modern treatment protocols, the need for supportive care, including nutrition, becomes an essential component in comprehensive cancer care.

A number of nutritional conditions are observed among healthy children in Brazil. Although differences are observed between regions, the prevalence of undernutrition among under 5-year-old children decreased from 37% in 1974–1975 to 7% in 2006–2007. This has been observed alongside a marked increase in the prevalence of 6- to 11-year-old overweight children – a trend that is recognized globally among many low- and middle-income countries. Other public health issues related to nutritional morbidities include vitamin A deficiency, iodine deficiency disorders, as well as anemia, which affects approximately 25% of Brazilian children.<sup>1–3</sup>

Among children with cancer, there is a paucity of evidence about nutritional challenges and their implications on the delivery of cancer care to Brazilian children. Very few studies have been published on nutrition in Brazilian children with cancer; nutritional issues have been demonstrated in this population, such as a higher prevalence of undernutrition, decreased growth rate and decreased copper and zinc levels.<sup>4–7</sup>

## Objectives of the meeting

The “3rd International Society of Pediatric Oncology – Pediatric Oncology in Developing Countries (SIOP-PODC) workshop on Nutrition in Children with Cancer” was held in São Paulo, Brazil on November 13, 2015. This event was organized by the Instituto de Tratamento do Câncer Infantil (ITACI) of the Instituto da Criança do Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo in collaboration with the Sociedade Brasileira de Oncologia Pediátrica (SOBOPE). This meeting was attended by 102 pediatric oncologists, hematologists, dietitians, nurses and other health professionals working in the field of pediatric oncology from the state capital (48%), other parts of São Paulo State (32%) and other regions of Brazil (20%), as well as experts in nutrition from foreign institutions.

The objective of this SIOP-PODC initiative was to get a better understanding of the regional facilitators and barriers to nutritional care of children with cancer and establish a regional infrastructure to improve both the delivery of clinical services and to advance knowledge. Specifically, the nutritional workshop in Brazil aimed to:

- (1) Assess knowledge on nutritional issues and standards of practice among health professionals providing nutritional care to children with cancer across Brazil;

- (2) Identify research opportunities and possible collaborations through the SIOP-PODC committee;
- (3) Determine the standard of care among institutions of different levels of nutritional care; and
- (4) Determine the state of the science on nutrition and pediatric oncology in Brazil.<sup>8</sup>

## Outcomes and next steps

Outcomes of the meeting and next steps toward achieving the aforementioned objectives are:

- (1) To develop a partnership between SIOP and SOBOPE;
- (2) To expand existing projects on nutrition in children with cancer with the support of both SIOP and SOBOPE;
- (3) To plan a nutrition survey of all pediatric oncology centers in Brazil through SOBOPE;
- (4) To assess the relationship between nutrition and abandonment of Brazilian children with cancer;
- (5) To plan the succeeding workshop in Brazil during the next SOBOPE conference with the aim of achieving better national visibility and raise awareness about nutrition.

The partnership between SIOP and SOBOPE to improve the nutrition of Brazilian children with cancer is very promising, especially as Brazil has a large number of children being treated for cancer and very few research protocols on nutrition. The scientific support of both the Brazilian and the international societies will most certainly advance research on nutrition in children with cancer in Brazil.

## Conflicts of interest

This project is sponsored and supported by Nutricia and Josephine Garvey, Danone team and the Fundação Criança.

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