Physiotherapy in Oncology and Cancer Control Actions: the Importance of Physiotherapists' Knowledge and Performance at Different Levels of Care

https://doi.org/10.32635/2176-9745.RBC.2025v71n3.5198EN

Fisioterapia em Oncologia e nas Ações de Controle do Câncer: a Importância do Conhecimento e Atuação do Fisioterapeuta nos Diferentes Níveis de Atenção

Fisioterapia en Oncología y Acciones de Control del Cáncer: la Importancia del Conocimiento y la Actuación del Fisioterapeuta en los Diferentes Niveles de Atención

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INTRODUCTION

Physiotherapy in oncology is an essential field for promoting health, improving the quality of life, and prognoses of cancer patients. Despite being considered a physiotherapy specialty area[1], it is fundamental that all physiotherapists have basic knowledge to act in cancer control[2-4]. The epidemiology of this disease is a global public health issue of great magnitude, being one of the main causes of death and consequently one of the main obstacles for increasing life expectancy worldwide[5,6].

Cancer control is understood as a set of continuous actions that involve controlling exposure to risk factors, diagnosis, treatment, follow-up during survival, palliative care, and end-of-life care. This highlights the need for integral care and planning that contemplate interdisciplinary strategies, including the physical therapy team[7].

This article discusses the importance of oncological physiotherapy beyond the specialist, considering that physiotherapists receive generalist training, addressing their relevance at distinct levels of healthcare, and offering strategies to integrate this knowledge from graduation to professional practice.

DEVELOPMENT

The legal principles governing the organization of care, physiotherapeutic training, and assistance are founded on the Health Care Network (HCN). Ordinance No. 3 of September 28, 2017[8], establishes the guidelines for structuring HCN to reformulate the National Health System (SUS), improving its structure as well as the quality and impact of the services provided. Moreover, this ordinance represents a step forward in the health policy, strengthening SUS as an essential public policy to ensure the constitutional rights of citizens. HCNs are designed to meet specific health requirements, ensuring a complete cycle of care and warranting continuity and integrity of assistance across different care levels: primary, secondary, and tertiary[8].

Chart 1 summarizes how health care levels are articulated according to the technological density levels of the assistance.

Resolution COFFITO No. 424, of July 8, 2013[10], that institutes the Code of Ethics and Deontology of Physiotherapy, defines, in Chapter II, Article 4, the role of Physiotherapy in health promotion, disease prevention, treatment, and health recovery, in addition to palliative

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Chart 1. Health care levels according to technological density levels of the assistance

Technological density levels of the assistance				
Care level	**Definition/Structure of service**	**Type of service**	**Health issues addressed**	**Physiotherapeutic approaches/Practical Applications**
Primary care	Basic health unit. Focus on health promotion, prevention of worsening conditions, early diagnosis, and the start of palliative care	Low-complexity care for basically every situation, except for life-threatening cases	85%	Physical activity and exercise programs; health education (preventing falls, promoting healthy life habits); group appointments; postural, home, and ergonomic assessment and guidance
Secondary care	Specialized services in hospitals and outpatient clinics. Focus on preventing complications, rehabilitation, and symptom control	Caters to different clinical situations that require specialized services of medium complexity	10%	Specialized outpatient rehabilitation; use of manual therapies and electrophysical resources; and adaptation to the use of prosthetics and orthoses
Tertiary care	More complex services and reference hospitals. Focus on the treatment of complex, chronic cases, and specialized palliative care	Treatment of cases that could not be managed at other levels, either for being singular or complex (high complexity)	5%	Work at Hospitalization Units, semi-intensive therapy, intensive therapy, and emergency care; assistance at specialized treatment units (chemotherapy and radiotherapy wards); exclusive palliative care, immediate postoperative follow-up

Source: Mendes[9].

care reinforcing the role of physiotherapists in oncological assistance. The practice must be guided by the pursuit of quality of life, with no discrimination, following the principles of the main health system in force in Brazil[10].

Resolution CNE/CES No. 4/2002[11], that establishes the National Curricular Guidelines of the Undergraduate Physiotherapy Course, defines, in Article 3, the profile of the physiotherapist as a professional with generalist, humanist, critical, and reflexive training, capable of working at every level of healthcare, grounded on scientific and intellectual rigor. Article 4 specifies that, regarding healthcare, the physiotherapist must be capable of developing actions for prevention, promotion, protection, and rehabilitation, both at the individual and collective levels, ensuring their practice is performed with integrity and continuity with other instances of the health system. Article 5 highlights that the objective of physiotherapist training is to provide the necessary knowledge for the professional to work at every level of healthcare, reinforcing the statement in the previous article about the programs to be developed. Finally, Article 6 states that the essential contents of the Physiotherapy Undergraduate Course should encompass the complete health-disease process of the individual, family, and community, aligned with epidemiological and professional reality, and ensuring integrity of care actions in physiotherapy[11].

Considering the epidemiological scenario, cancer represents the greatest challenge to global public health, being one of the main causes of death and, consequently, one of the greatest obstacles to increasing life expectancy on the planet. In several countries, it ranks first or second among the main causes of premature deaths, that is, those occurring before 70 years old. The incidence and mortality due to cancer are rapidly growing worldwide. Cancer control is currently understood as a set of continuous actions, from risk factor exposure control to early detection of disease and palliative care. The latter includes diagnosis, treatment, follow-up during survival, and end-of-life care for those who did not achieve a cure or disease control. To ensure integral care across all phases, detailed planning, organization of health services, and constant monitoring of control actions are essential[5,6].

Law No. 14.758[12], of December 19, 2023, which establishes SUS' National Cancer Prevention and Control Policy and the National Patient Navigation Program

for People with Cancer Diagnosis, has the following objectives: I – reduce the incidence of different types of cancer; II – ensure proper access to integral care; III – improve the quality of life of people diagnosed with cancer; and IV – decrease mortality and inability caused by the disease. The law also considers integral care as actions towards prevention, screening, early detection, diagnosis, treatment, rehabilitation, and palliative care, which must be provided promptly to ensure the continuity of care.

The Pan American Health Organization (PAHO) is promoting three global campaigns in the Americas that seek to address the load of cancer, strategies to reduce tobacco and alcohol use, support the introduction of human papillomavirus (HPV) vaccine and HPV tests, like screening for cervical cancer; promote improvements in the quality and access to diagnosis of breast cancer; increase survival of childhood cancer. It also fosters improvements in radiology services and access to essential and accessible chemotherapy medication, as well as promotes the expansion of access to palliative care programs and opioids for pain relief and symptom management[13].

Resolution No. 364/2009[14] (altered by Resolution No. 390/2011[1]), by recognizing the need to offer proper and specific professional assistance to meet functional-kinesiological-clinical requirements of individuals with functional deficits derived from oncological diseases, acknowledged Oncological Physiotherapy as a specialty of the physiotherapist professional.

Resolution COFFITO No. 390/2011[1], which rules on the oncological physiotherapy professional specialty, specifies in its Article 6 that the work of the oncological physiotherapist is characterized by the professional exercise in every level of health care, in every phase of ontogenic development, with actions towards prevention, promotion, protection, screening, education, intervention, recovery, and rehabilitation of the oncological patient in the following settings, among others, hospital; outpatient clinic; at home and home care; public; philanthropic; military; private and third sector[1]. According to the Brazilian Association of Physiotherapy in Oncology (ABFO), there are currently only 524 physiotherapists specialized in oncological physiotherapy in the country, highlighting the need for generalist professionals to perform cancer control actions.

Cancer control involves actions across all levels of care (primary, secondary, and tertiary) that are structured according to their complexity (Chart 1). Therefore, oncological physiotherapy must be performed in every healthcare setting. Physiotherapists must enable themselves to work autonomously or within multidisciplinary teams in public, private, and philanthropic institutions, among others. For instance, among SUS existing programs, *Programa Melhor em Casa* (Better at home program) is an initiative that offers home care to patients who need continuous care, including oncological patients, avoiding prolonged hospitalization and promoting comfort and recovery in the family environment, in which the physiotherapist participates as part of the multiprofessional team[15].

In this scenario, continuous training is essential to ensure qualified service based on scientific evidence. ABFO plays an essential role in promoting knowledge and strengthening the work of physiotherapists in cancer control. As a representative entity of the specialty in Brazil, ABFO aims to assemble physiotherapists from all over the country, offering scientific and technical support, promoting events, and conferring specialist titles. Moreover, the association supports policies that ensure better training conditions and professional recognition in the field. ABFO's values, founded on ethics, excellence, innovation, and transparency, reinforce that physiotherapists should be prepared to work in oncological care, regardless of being specialists or not. Thus, the association strengthens physiotherapy in oncology as a key component of integral care for patients with cancer.

In this context, considering the epidemiological reality of cancer in the country, physiotherapy curricular guidelines, organization of care in SUS, and the existence of a national representative association of physiotherapy in oncology, it is pressing to discuss the role of each professional in cancer control actions.

Thus, we propose that physiotherapy for oncological patients occurs according to complexity levels (Chart 2).

Chart 3 describes the physiotherapeutic action proposal for oncology patients based on cancer control actions, complexity level, and professional profile. In this model, the oncology specialist physiotherapist is responsible for training all professionals, so they learn their roles in cancer control action.

The proposed actions aim to include oncology physiotherapy at every level of healthcare by adding it to the curricular guidelines of undergraduate courses, promoting debates with other professional associations of physiotherapy specialties to integrate cross-sectional knowledge areas, in addition to elaborating qualification courses according to complexity to be taught by oncology specialists.

CONCLUSION

Physiotherapy in cancer control should be understood as a broad field of action, not restricted to specialists

Chart 2. Proposal for physiotherapeutic action in oncological patients according to complexity

Physiotherapist	Description	Physiotherapeutic approaches/ Practical Applications
Generalist	All physiotherapists shall have basic knowledge on cancer control actions, that is, actions towards health promotion, prevention or relief of simple situations of physical, psycho-social, or spiritual suffering related to cancer situations, strategies for early detection of the main types of cancer, and physiotherapeutic action in the pre-habilitation, habilitation and rehabilitation phases, and in palliative care with procedures of low complexity	Actions towards health promotion, cancer prevention, diagnosis, and control (healthy life habits, physical exercise, non-smoking or drinking, awareness of the importance of the HPV vaccine)
Specialist in other areas of professional expertise	Assistance for oncological patients, offered by specialist physiotherapists in any other area of expertise, shall be performed when caring for oncology patients with specific demands, within their professional expertise area	Adaptation of orthoses and prosthetics, rehabilitation of oncological treatment complications in their area of expertise, and postoperative care
Oncology specialist	Assistance for oncological patients offered by oncology specialists shall be performed in more complex situations or when the patient is in high-complexity treatment	Work at Intensive Care Units, Bone Marrow Transplant Centers, treatment of lymphedemas, rehabilitation of more specific changes from oncological treatment

alone, considering that physiotherapists have a generalist education. Considering the rising incidence of cancer and the need for integral care, all physiotherapists must acquire basic knowledge to contribute to health promotion and cancer prevention actions, early detection of the main cancer types, pre-habilitation and habilitation for oncological treatment, rehabilitation, and palliative care, proposing actions for every level of healthcare.

Continuous education of professionals by specialists and integration of physiotherapy in oncology into curricular guidelines of undergraduate courses are fundamental steps to ensure qualified and evidence-based assistance. Thus, physiotherapy can strengthen its contribution to the care of cancer patients, promoting better quality of life and broadening the available therapeutic possibilities.

ACKNOWLEDGMENTS

To the CREFITO-2 board, especially to President Dr. Wilen Heil e Silva.

CONTRIBUTIONS

Anke Bergmann and Nathalia Bordinhon Soares contributed substantially to the conception of the study and data acquisition. All the authors contributed to drafting the manuscript and approved the final version to be published.

DECLARATION OF CONFLICT OF INTERESTS

The author Anke Bergmann declares a potential conflict of interest due to her being the scientific-editor of INCA's *Revista Brasileira de Cancerologia*. The other authors do not have any conflicts of interest.

DATA AVAILABILITY STATEMENT

All the contents associated with the article are included in the manuscript.

FUNDING SOURCES

None.

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Chart 3. Description of proposal for physiotherapeutic action in oncology patients according to cancer control actions, complexity level, and professional profile.

Cancer control actions	Description of physiotherapist action	Complexity level	Professional profile
Health promotion and cancer prevention	Health education on the main risk factors for cancer	Low	Generalist
	Physiotherapeutic assistance to decrease exposure to cancer modifiable risk factors (nutrition, sedentary lifestyle, smoking, alcohol consumption, infections, among others)	Low	Generalist
Early detection of the main cancer types	Health education and population guidance regarding screening strategies and early cancer diagnosis	Low	Generalist
	Assessment of signs and symptoms of the main cancer types, according to the demographic characteristics of each patient and the conditions of the service location	Low	Generalist
Pre-habilitation	Assessment of health conditions at the time of cancer diagnosis and before the first oncology treatment	Low	Generalist
	Identification of risk factors for the main complications of the oncology treatment	Low	Generalist
	Guidance regarding the introduction or maintenance of physical activity practice and healthy behaviors	Low	Generalist
	Physiotherapeutic intervention for treating pre-existing symptoms and/or modifiable risk factors for the main complications of oncology treatment	Low, medium, or high*	All*
Habilitation	Assessment of health conditions during the whole oncology treatment	Low	All*
	Guidance regarding the introduction or maintenance of physical activity practice and healthy behaviors	Low	
	Guidance regarding the prevention of complications during oncology treatment	Low or Medium*	Specialist in any area
	Physiotherapeutic treatment in the pre- and postoperative period and during oncology treatment to prevent oncology complications	Medium or Low*	
	Physiotherapeutic treatment of acute or chronic complications associated with oncology treatment		
Rehabilitation	Physiotherapeutic treatment of chronic complications associated with oncology treatment	Low, medium, or high*	All*
Palliative care	Assessment of health conditions	Low	Generalist
	Guidance regarding symptom prevention and functionality maintenance	Low	Generalist
	Physiotherapeutic treatment of acute or chronic complications associated with disease evolution	Low, medium, or high*	All*
	Follow-up with families and patients in active death process	Low, medium, or high*	All*

Note: *Depending on the clinical situation to be treated (considering that every specialist professional can also work as a generalist in cancer control actions).

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Recebido em 21/3/2025
Aprovado em 30/5/2025

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