

# Contributions of Guiding Documents for the Promotion of Physical Activity in the National Health System for Cancer Prevention and Control

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*Contribuições de Documentos Orientadores para a Promoção da Atividade Física no Sistema Único de Saúde na Prevenção e no Controle de Câncer*

*Aportes de Documentos Orientadores para la Promoción de la Actividad Física en el Sistema Único de Salud en la Prevención y Control del Cáncer*

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## INTRODUCTION

Cancer prevention and control are global health priorities<sup>1</sup>. Brazilian estimates indicate 625,000 new adult cancer cases annually in the triennium 2020-2022<sup>2</sup>. In 2019, 235,000 deaths by cancer occurred in Brazil, and this group of diseases represented the second most frequent cause of death<sup>3</sup>. This scenario will aggravate between 2020 and 2040, with an increase of 66% in new cancer cases and 81% in cancer deaths in the country<sup>4</sup>.

The cancer diagnosis impacts the individuals, their family, and society. It is a long-course disease with many procedures and a financial burden to the health system. A study conducted by the National Cancer Institute José Alencar Gomes da Silva (INCA) verified in 2018 nearly R\$ 3.5 billion of federal direct healthcare costs of the Brazilian National Health System (SUS) inpatient and outpatient procedures in oncologic patients aged 30 or more. Projections indicate that the costs will increase in 2030 (approximately R\$ 5.9 billion) and 2040 (R\$ 7.8 billion)<sup>5</sup>. The rising trend of the cases reinforces the importance of implementing cancer control actions. These actions are essential to reduce the disease burden and the cancer economic impact in Brazil.

Primary prevention is the best long-term, cost-effective strategy with great potential to decrease new cancer cases and cancer deaths<sup>6</sup>. Endorsed by different institutions, physical activity (PA) stands out among these actions as a critical element in preventing up to nine cancer types – breast, colon, endometrium, esophageal (adenocarcinoma), stomach, kidneys, bladder, liver, and

lung<sup>7-14</sup>, including the most incident in Brazilian men and women<sup>2</sup>. Evidence-based benefits are associated with reducing symptoms and side effects during treatment and increasing survival<sup>7-15</sup>. In Brazil, however, nearly half of the population older than 18 years is barely active<sup>16,17</sup>, that is, they need to meet the recommendations for the duration and intensity of PA.

A comprehensive array of integrated actions with health-promoting environments, for instance, healthy urban planning, community-centered activities, and creation of safe and healthy environments, should be implemented to reverse this scenario, in addition to behavioral changes such as health education actions, health counseling, and informative campaigns and modifications of the systems as intersectoral integrated actions<sup>8,12,18</sup>.

This opinion article emphasizes the importance of guiding documents to promote PA at SUS and its contribution to cancer control in Brazil. Although Sports, Education, and Social Work are essential for the policies and promotion of PA, the current article will address health initiatives at SUS.

## DEVELOPMENT

### GUIDING DOCUMENTS

Recently, four guiding documents were published:

- (1) *Guide of physical activity for the Brazilian population*<sup>12</sup>;
- (2) *Guide of physical activity for the Brazilian population: recommendations for health caregivers and managers*<sup>19</sup>;
- (3) *Diet, nutrition, physical activity, and cancer: a global*

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*perspective – a summary of the third report of experts within a Brazilian perspective<sup>8</sup>; (4) Physical activity and cancer: recommendations for prevention and control<sup>13</sup>.* Although the target of the *Guide of physical activity* is the population, much of its interpretation and utilization will rely on health caregivers actions. Consequently, the four documents listed have health managers and caregivers as the target public.

The *Guide of physical activity for the Brazilian population* presents several ways of including PA daily. The *Guide of physical activity for the Brazilian population: recommendations for health caregivers and managers* orientates how these players can address this theme in their professional practice. These two publications result from the policies and actions evaluation already developed by SUS, including cancer prevention as one of the health benefits and reinforcing the importance of PA for human development, regardless of the life phase. In addition to emphasizing the health sector's importance in promoting PA, intersectoral initiatives are no less important to change the current Brazilian scenario<sup>12,19</sup>.

Particularly about the relationship between PA and cancer, the document *Diet, nutrition, physical activity, and cancer: a global perspective – a summary of the third report of experts within a Brazilian perspective<sup>8</sup>* is a translation and adaptation of the cancer prevention recommendations through PA, food, and nutrition for the Brazilian context. It offers technical material to implement individual and collective interventions to promote PA and healthy nutrition. This document strengthens the PA practice, regardless of body weight, to decrease cancer risk. It also recommends that individuals be physically active in their daily routine at different moments, such as during leisure time and transportation, pursuing activities that cause satisfaction. It affirms that these recommendations also apply to survivors after the diagnosis of cancer<sup>8</sup>.

The document *Physical activity and cancer: recommendations for prevention and control<sup>13</sup>* compiles a set of evidences indicating the protective effect of PA against several cancer types, emphasizes the impact on survival increase of patients with colorectal, breast, and prostate cancer, and deems PA as essential for cancer prevention and control. Furthermore, it affirms the necessity of considering preferences, availability, and place to practice. It also contributes to changing the paradigm that oncological patients must rest and avoid physical efforts, reinforcing that cancer survivors should incorporate PA into the routine even during cancer treatment<sup>13</sup>.

These scientific-based documents promoting PA at SUS are relevant because their source is the government and experts entities that can expand the knowledge and practice of health managers and caregivers with a cancer-

centered approach to strengthen initiatives and increase the population's access to PA. These documents can be construed as guiding policies and actions of promotion of PA at SUS with essential data about the relation with cancer.

As knowledge about the relationship of PA with cancer prevention and control is scarce<sup>20</sup>, the potential relevance of these documents of general or specific nature is quite evident in helping managers and caregivers. Nevertheless, the challenge of implementing the guidance should include effective communication strategies for large-scale dissemination and *a posteriori* analysis for quality control, among other aspects<sup>10,21</sup>.

## CHALLENGES TO TURN GUIDANCE INTO PRACTICE

Beyond the importance of the documents in helping health managers and caregivers with cancer prevention and control, policies and actions are an additional demand. Even if other aspects may help the materialization of the guidance, the focus is PA-centered programs for the population because it is through these programs that the guidances become practice at SUS.

PA community programs in Primary Health Care are an effective intervention to ensure population access<sup>18,22</sup>. Their importance is acknowledged within the Brazilian governmental planning to face chronic diseases, including cancer<sup>23</sup>. Nevertheless, the implementation of the policies and PA effective interventions expansion have yet to be satisfactory globally and are unequal.

Within the perspective of public policies already implemented in Brazil, the "*Programa Academia da Saúde*" (Health Gym Program)<sup>25</sup> is currently the main national initiative offered. Based on successful municipal experiences in expanding PA access, this program was created in 2011 to promote health and healthy habits to the population. The program has more adherence among those who practice less PA: women, and individuals with low socioeconomic status. It is a crucial way of reducing inequities, increasing access with positive impacts on health indicators, and helping expand PA practice<sup>16,25,26</sup> during leisure activities.

However, in despite of the progress of the program implementation in the country, some challenges, such as municipal, state, and federal scarce resources to construct and fund new units still exist, which may impact the continuity and sustainability in the long term, potentialize the social inequities and worsen the health indicators.

These challenges mirror the contrast between the already acknowledged theoretical recognition of PA and the unsatisfactory incorporation by the tripartite management of SUS<sup>25-31</sup>. The participation of barely 2.7% of the Brazilian population reflects the reduced scope of

community PA program<sup>16,27</sup>, reinforcing the necessity to strengthen these actions. While reviewing the current manuscript, the federal government launched an initiative to fund the implementation of PA at Primary Health Care. However, it was not included in the study's objective as it is still in its initial implementation phase.

In ambulatory and hospital healthcare, after a diagnosis of cancer, there is a shortage of specialized programs, generally restricted to research projects in Universities, University Hospitals and philanthropic entities<sup>20</sup>. These are initiatives considered relevant to widen the offer of PA for cancer control.

Expanding the offer of PA through strengthening policies and actions for the general population and individuals after a cancer diagnosis can contribute substantially for cancer control in Brazil because it could reduce the number of cases, deaths, and costs of oncologic treatment<sup>5,32</sup>. The potential reduction of 10% by 2030 of the prevalence of insufficient PA in leisure activities detected in 2019, would avoid SUS of expending R\$ 20.4 million to treat cancer in 2040<sup>5</sup>, that could be redirected to health policies and actions, among them, the promotion of PA.

## CONCLUSION

Guiding documents are essential tools because of their potential to increase the knowledge and practice of health managers and caregivers; furthermore, they can shed light on the relationship between PA and cancer control and prevention and support Primary Health Care initiatives toward the individuals after the diagnosis, during, and after treatment.

The documents may change the current ambulatory and hospital healthcare paradigm and favor increasing PA practice during and after cancer treatment. Future evaluations are necessary to understand if and how the contents were incorporated into the health managers and caregivers actions, mainly if they will contribute to induce policies and actions that favor the PA practice. Community programs, especially the "Health Gym Program" and others promoting PA after cancer diagnosis, must be strengthened for full functioning and expansion. In addition, it is necessary to implement programs that promote PA in ambulatory and hospital healthcare.

## CONTRIBUTIONS

All the authors contributed substantially to the study design, acquisition, analysis, and interpretation of the data, wording, and critical review. They approved the final version to be published.

## DECLARATION OF CONFLICT OF INTERESTS

There is no conflict of interest to declare.

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