It's time to open our eyes: The urgent need to integrate physical exercise into oncology care

Eladio J. Collado Boira . *Dean. Faculty of Health Sciences. University Jaume I. Castellon, Spain. Director. Physical Activity and Oncology Chair. José Soriano Ramos Foundation. Spain.*

Dear Editor:

Scientific evidence supporting the benefits of physical exercise for cancer patients, regardless of disease stage or treatment, is overwhelming. However, despite its demonstrated positive impact, the integration of exercise as a fundamental component of the therapeutic arsenal in oncology services remains severely limited.

Numerous studies have shown that physical exercise improves treatment tolerance and reduces side effects, with fatigue management being one of the most significant outcomes (Gray et al., 2024), even mitigating the cardiotoxicity of certain treatments (Mattioli et al., 2025; Wilson et al., 2023). Additionally, it enhances physical fitness, including strength, cardiovascular endurance, and body composition (Garcia-Roca et al., 2024), critical factors in preventing sarcopenia (Papadopetraki et al., 2023), myalgia, neuropathy (Uysal et al., 2025), and bone mineralization deficits (Albini et al., 2024). These benefits are undeniably linked to improved quality of life and lower prevalence of psychological disorders, such as anxiety and depression (Suárez-Alcázar et al., 2024), while also fostering greater resilience. The positive impact of group exercise during cancer treatment has been well-documented, along with its role in empowering patients in managing their own disease process (Garcia-Roca et al., 2022).

This growing body of knowledge on the physiological mechanisms underlying exercise's effects on cancer has driven multiple scientific societies and health organizations to advocate for its inclusion in treatment plans (Hayes et al., 2019; Pollán et al., 2020; Schmitz et al., 2019). International consensus guidelines on exercise for cancer patients have also been established (Campbell et al., 2019).

Corresponding author. *Faculty of Health Sciences. University Jaume I. Castellon, Spain.*
E-mail: colladoe@uji.es
Submitted for publication April 01, 2025.
Accepted for publication April 02, 2025.
Published April 04, 2025.
Physical Activity, Exercise and Cancer.

Identifier: https://doi.org/10.55860/LCJK4320

According to the 2023 report by the Spanish Society of Medical Oncology (SEOM; 2024), nearly 280,000 new cancer cases were recorded in Spain. Oncologists, surgeons, pathologists, and radiotherapists prescribe treatments such as surgery, chemotherapy, immunotherapy, and radiotherapy based on well-established clinical guidelines. However, what percentage of these professionals currently prescribe physical exercise as a core component of comprehensive cancer treatment? Of these hundreds of thousands of new patients each year, how many have access to specialized oncology exercise programs in healthcare or community settings? Given the current state of the art, this lack of resources poses an ethical dilemma that cannot be ignored.

In our healthcare system, as is the case internationally, most entities developing care and research programs on physical exercise for cancer patients operate within association, foundation, or university chair models, relying on grants, donations, subsidies, and administrative goodwill for their capacity to function—or even to survive. There is also a significant shortage of academically and professionally specialized professionals in physical activity and sports within oncology. This instability severely limits the ability to provide services proportional to the magnitude of the problem and the potential benefits of exercise.

Public administrations must recognize the severe deficit in healthcare service portfolios related to oncology exercise. The role of healthcare managers in public administration is critical, as treatment and patient care decisions originate here—currently in an overly biomedical and mechanistic context. Decision-making should place greater focus on patients, not just on the disease. If we have learned anything, it is the necessity of working in multidisciplinary teams and understanding that outcomes improve when patients are in the best possible physical condition—strong, emotionally stable, and with a positive, optimistic attitude toward their cancer journey. Physical exercise provides all of this.

Perhaps the time is not far when a specialist in oncology exercise will be included on tumour boards, and the institution taking the first step will set an extraordinary precedent, garnering well-deserved recognition and leaving a lasting legacy of progress.

It is time—we must open our eyes and act.

Keywords: Physical exercise, Physical activity, Exercise, Cancer, Cancer prevention, Cancer treatments, Cancer survivors, Psychology, Sport medicine.

Cite this article as:
Collado Boira, E. J., (2025). It's time to open our eyes: The urgent need to integrate physical exercise into oncology care. *Physical Activity, Exercise and Cancer*, *2*(2), 38-40. https://doi.org/10.55860/LCJK4320

REFERENCES

Albini, A., La Vecchia, C., Magnoni, F., Garrone, O., Morelli, D., Janssens, J. Ph., Maskens, A., Rennert, G., Galimberti, V., & Corso, G. (2024). Physical activity and exercise health benefits: cancer prevention, interception, and survival. European Journal of Cancer Prevention. https://doi.org/10.1097/CEJ.0000000000000898

Campbell, K. L., Winters-Stone, K. M., Wiskemann, J., May, A. M., Schwartz, A. L., Courneya, K. S., Zucker, D. S., Matthews, C. E., Ligibel, J. A., Gerber, L. H., Morris, G. S., Patel, A. V., Hue, T. F., Perna, F. M., & Schmitz, K. H. (2019). Exercise Guidelines for Cancer Survivors: Consensus Statement from

International Multidisciplinary Roundtable. Medicine and Science in Sports and Exercise, 51(11), 2375-2390. https://doi.org/10.1249/MSS.0000000000002116

Garcia-Roca, M. E., Catalá-Vilaplana, I., Hernando, C., Baliño, P., Salas-Medina, P., Suarez-Alcazar, P., Folch-Ayora, A., & Collado Boira, E. (2024). Effect of a Long-Term Online Home-Based Supervised Exercise Program on Physical Fitness and Adherence in Breast Cancer Patients: A Randomized Clinical Trial. Cancers 2024, Vol. 16, Page 1912, 16(10), 1912. https://doi.org/10.3390/cancers16101912

Garcia-Roca, M. E., Rodriguez-Arrastia, M., Ropero-Padilla, C., Hernando Domingo, C., Folch-Ayora, A., Temprado-Albalat, M. D., Boldo-Roda, A., & Collado-Boira, E. (2022). Breast Cancer Patients' Experiences with Online Group-Based Physical Exercise in a COVID-19 Context: A Focus Group Study. Journal of Personalized Medicine, 12(3), 356. https://doi.org/10.3390/jpm12030356

Gray, L., Sindall, P., & Pearson, S. J. (2024). Does resistance training ameliorate cancer-related fatigue in cancer survivors? A systematic review with meta-analysis. Disability and Rehabilitation, 46(11), 2213-2222. https://doi.org/10.1080/09638288.2023.2226408

Hayes, S. C., Newton, R. U., Spence, R. R., & Galvão, D. A. (2019). The Exercise and Sports Science Australia position statement: Exercise medicine in cancer management. Journal of Science and Medicine in Sport, 22(11), 1175-1199. https://doi.org/10.1016/j.jsams.2019.05.003

Mattioli, A. V., Bucciarelli, V., & Gallina, S. (2025). The role of physical exercise in cancer therapy-related CV toxicity. Future Cardiology. https://doi.org/10.1080/14796678.2025.2451530

Papadopetraki, A., Giannopoulos, A., Maridaki, M., Zagouri, F., Droufakou, S., Koutsilieris, M., & Philippou, A. (2023). The Role of Exercise in Cancer-Related Sarcopenia and Sarcopenic Obesity. Cancers 2023, Vol. 15, Page 5856, 15(24), 5856. https://doi.org/10.3390/cancers15245856

Pollán, M., Casla-Barrio, S., Alfaro, J., Esteban, C., Segui-Palmer, M. A., Lucia, A., & Martín, M. (2020). Exercise and cancer: a position statement from the Spanish Society of Medical Oncology. Clinical and Translational Oncology, 22(10), 1710-1729. https://doi.org/10.1007/s12094-020-02312-y

Schmitz, K. H., Campbell, A. M., Stuiver, M. M., Pinto, B. M., Schwartz, A. L., Morris, G. S., Ligibel, J. A., Cheville, A., Galvão, D. A., Alfano, C. M., Patel, A. V., Hue, T., Gerber, L. H., Sallis, R., Gusani, N. J., Stout, N. L., Chan, L., Flowers, F., Doyle, C., … Matthews, C. E. (2019). Exercise is medicine in oncology: Engaging clinicians to help patients move through cancer. CA: A Cancer Journal for Clinicians, 69(6), 468-484. https://doi.org/10.3322/caac.21579

Suárez-Alcázar, M. P., García-Roca, M. E., Collado-Boira, E. J., Recacha-Ponce, P., Temprado-Albalat, M. D., Baliño, P., Muriach, M., Flores-Builes, R., Salas-Medina, P., Hernando, C., & Folch-Ayora, A. (2024). Exercise and Quality of Life (QoL) in Patients Undergoing Active Breast Cancer Treatment-Comparison of Three Modalities of a 24-Week Exercise Program-A Randomized Clinical Trial. Healthcare 2024, Vol. 12, Page 1107, 12(11), 1107. https://doi.org/10.3390/healthcare12111107

Uysal, N., Filiz, & Toprak, Ü. (2025). The effect of hand and foot exercises on peripheral neuropathy and quality of life in women with breast cancer: a randomized controlled trial. Supportive Care in Cancer 2025 33:2, 33(2), 1-11. https://doi.org/10.1007/s00520-025-09145-x

Wilson, R. L., Christopher, C. N., Yang, E. H., Barac, A., Adams, S. C., Scott, J. M., & Dieli-Conwright, C. M. (2023). Incorporating Exercise Training into Cardio-Oncology Care: Current Evidence and Opportunities: JACC: CardioOncology State-of-the-Art Review. JACC: CardioOncology, 5(5), 553-569. https://doi.org/10.1016/j.jaccao.2023.08.008

