

The Interdisciplinary Rehabilitation Care Team and the Role of Physical Therapy in Survivor Exercise

Margaret L. McNeely, PT, PhD, Naomi Dolgoy, MSc, OT, Mona Al Onazi, BSc, PT, and Kirsten Suderman, BSc



© Wavebreak Media/ThinkStock

Background: Rehabilitation professionals offer expertise in functional assessment, treatment of impairments and functional limitations, and disability prevention. To optimize recovery, and often prior to participating in community-based exercise programming, survivors may need rehabilitation services from a range of healthcare professionals, including physiatrists, nurses, nutritionists, psychologists, and speech, occupational, and physical therapists.

Objectives: Survivors with physical impairments and functional limitations may benefit from interdisciplinary rehabilitation and physical therapy, including tailored therapeutic exercise interventions.

Methods: A literature review was conducted using the key words *cancer survivor*, *cancer rehabilitation*, *impairment*, *fatigue*, *lymphedema*, *chemotherapy-induced peripheral neuropathy*, and *exercise*. MEDLINE®, EMBASE, Cochrane Database of Systematic Reviews, and CINAHL® databases were searched.

Findings: Nurses play a critical role in identifying survivors whose function or fitness is compromised to the point where participation in community-based exercise programming would be inappropriate or unsafe. The interdisciplinary rehabilitation care team can help facilitate the survivor's transition to community-based exercise programming.

Margaret L. McNeely, PT, PhD, is an associate professor, Naomi Dolgoy, MSc, OT, is a doctoral candidate, Mona Al Onazi, BSc, PT, is a graduate student, and Kirsten Suderman, BSc, is a doctoral student, all in the Department of Physical Therapy at the University of Alberta in Edmonton. The authors take full responsibility for the content of the article. The authors did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the authors, planners, independent peer reviewers, or editorial staff. McNeely can be reached at mmcneely@ualberta.ca, with copy to editor at CJONEditor@ons.org. (Submitted July 2016. Revision submitted September 2016. Accepted for publication October 1, 2016.)

Key words: cancer; physical therapy; cancer rehabilitation; impairment; exercise

Digital Object Identifier: 10.1188/16.CJON.S2.8-16

Cancer treatment introduces risk for impairments and functional limitations that increase the potential for disability and reduced quality of life (QOL) (Stout et al., 2016). Research evidence supports timely and appropriate cancer rehabilitation to optimize recovery from cancer and to allow the survivor to live life to the fullest (Stout et al., 2016). Exercise has emerged as an effective long-term rehabilitation intervention that can improve and optimize the health and well-being of cancer survivors (Dennett, Peiris, Shields, Prendergast, & Taylor, 2016). Benefits from exercise include increased lean body mass and physical function, reduced pain and fatigue, and improved QOL (Dennett et al., 2016; McNeely et al., 2006). In addition, for some survivors, exercise may increase overall and cancer-specific survival (Ballard-Barbash et al., 2012; Ibrahim & Al-Homaidh, 2011; Kenfield, Stampfer, Giovannucci, & Chan, 2011; Moorman, Jones, Akushevich, & Schildkraut, 2011).

Despite the known benefits, few cancer survivors report meeting the minimal public health guidelines for physical activity (Boyle, Lynch, Courneya, & Vallance, 2015; Boyle, Vallance, Ransom, & Lynch, 2016). Many survivors report feeling neither physically ready nor prepared to engage in community-based exercise programs designed for the general public (Cheifetz et al., 2014) and cite impairments, such as pain and fatigue, as barriers to participation (Courneya et al., 2005, 2008; Rogers et al., 2008). Although practice guidelines often recommend increased physical activity and exercise to address physical impairments, details are generally vague and largely mimic public health recommendations of 150 minutes of moderate-to-vigorous exercise per week, with only limited consideration to the type of impairment or its severity (Rock et al., 2012). In addition, exercise specialists working in the community are not trained to address cancer-related impairments (Silver, Baima, & Mayer, 2013). Therefore, a need exists for cancer rehabilitation