

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

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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.

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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