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## Evaluation of a Comprehensive Rehabilitation Program for Post-Treatment Patients With Cancer

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**R**ecent improvements in diagnostics and treatments have led to increased survival expectancy in patients with cancer. As a result, a growing proportion of patients now is considered to be potentially cured or at least in long-term remission. However, many cancer survivors who have completed medical treatment still are facing distressing physical (e.g., fatigue, impaired physical capacity), psychological (e.g., anxiety, depression, stress, insecurity, decreased self-esteem), and social difficulties (e.g., hindered job reintegration, social isolation), which, in turn, lead to diminished quality of life (QOL) (Curt et al., 2000; De Grève et al., 2005; Ganz et al., 2004; Gotay, Holup, & Pagano, 2002; Korstjens, Mesters, van der Peet, Gijzen, & van den Borne, 2006).

To meet these often under-recognized and insufficiently addressed needs, many physical, psychosocial, or combined interventions have been developed for cancer survivors (Courneya, 2003; Segal et al., 2003; Young-McCaughan et al., 2003). Rehabilitation of patients with cancer and, more specifically, cancer survivors aims to improve QOL by minimizing physical impairments and disability caused by cancer and associated treatments (McNeely et al., 2006; Yadav, 2007). In addition, a more psychological focus using a cognitive-behavioral training program also has beneficial effects on the mental health of cancer survivors (Osborn, Demoncada, & Feuerstein, 2006). As such, combining physical and psychosocial interventions may lead to greater improvements in physical and mental health (May et al., 2009).

Studies evaluating these interventions focused mainly on the effects on general QOL, fatigue, and physical condition and less on psychosocial concepts, such as anxiety, depression, kinesiophobia, and distress. In addition, patient characteristics, intervention methods, and outcome measures were very different between

**Purpose/Objectives:** To evaluate the effects of a rehabilitation program on quality of life, fatigue, fear of movement (kinesiophobia), distress, anxiety, depression, and physical condition.

**Design:** Pretest/post-test.

**Setting:** An outpatient rehabilitation setting in the Oncology Centre at the University Hospital Brussels in Belgium.

**Sample:** 36 patients who had completed cancer treatment with a curative potential.

**Methods:** Participants completed a questionnaire and underwent a physical test at baseline and at the end of the program. The measurement instruments used included the European Organisation for Research and Treatment of Cancer Quality-of-Life Questionnaire–Core 30, Functional Assessment of Cancer Therapy–Fatigue, Hospital Anxiety and Depression Scale, RAND-36, Tampa Scale for Kinesiophobia, Distress Barometer, and Tecumseh Step Test.

**Main Research Variables:** Quality of life, fatigue, kinesiophobia, distress, anxiety, depression, and physical condition.

**Findings:** Significant improvement was observed in quality of life ( $p < 0.001$ ), physical condition ( $p = 0.007$ ), fatigue ( $p = 0.01$ ), and depression ( $p = 0.012$ ). In contrast, kinesiophobia ( $p = 0.229$ ), distress ( $p = 0.344$ ), and anxiety ( $p = 0.101$ ) did not change significantly.

**Conclusions:** A general and significant improvement in all aspects affecting quality of life and rehabilitation was observed, but less so for aspects that might be influenced by prognostic concerns. The relative contribution of the program versus spontaneous recovery and long-term impact need to be determined further in a prospective randomized study.

**Implications for Nursing:** Multidisciplinary rehabilitation should become part of the total care plan for patients with cancer.

studies. For example, only postmenopausal patients with breast cancer that had undergone surgery, chemotherapy, and radiotherapy (Courneya, 2003) and only