

# The Impact of Livestrong<sup>®</sup> at the YMCA for Cancer Survivors

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**OBJECTIVES:** To determine the clinical significance of pre- and post-exercise rehabilitation physical and psychosocial outcomes of the Livestrong<sup>®</sup> at the YMCA program.

**SAMPLE & SETTING:** 158 participants at the YMCA of the Fox Cities in Appleton, Wisconsin, were analyzed for pre- and postparticipation physical outcomes, 68 participants were analyzed for pre- and postparticipation psychosocial outcomes, and 11 participants were interviewed about their experiences.

**METHODS & VARIABLES:** Participant interviews and statistical analysis of pre- and postparticipation measurements of physical and psychological determinants of health were used to evaluate the effectiveness of this exercise rehabilitation program.

**RESULTS:** Quantitative data suggest physical measures of strength, balance, flexibility, and endurance, and psychosocial measures of anxiety, fatigue, sleep disturbance, satisfaction with social role, and pain interference were significantly improved post-exercise rehabilitation. Six themes that addressed experiences with Livestrong at the YMCA were qualitatively identified through participant interviews.

**IMPLICATIONS FOR NURSING:** It is crucial for the members of the interprofessional healthcare team to disseminate exercise rehabilitation information to survivors. Equally important is identifying when and how an exercise program will be discussed in the treatment plan. A referral system cue within the current electronic health record could help link local community exercise programs for survivors.

**KEYWORDS** cancer; survivors; exercise rehabilitation; quality of life; survivorship

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Cancer is arguably one of the most devastating diagnoses for deteriorating overall health related to the condition itself and selected treatment modalities. With significant advances in medicine involving early screening and detection and subsequent diagnosis and treatment, cancer is no longer consistently associated with fatal outcomes. In fact, the overall mortality rate for cancer in the United States has steadily declined since the 1990s (National Cancer Institute [NCI], 2018). About 67% of individuals with a cancer diagnosis live at least five years beyond their date of diagnosis, with most dying from noncancerous causes (NCI, 2016). The growing presence of cancer survivors increases the demand to meet needs related to post-treatment concerns, particularly those that yield a loss of physical functioning or an inability to perform activities of daily living (ADLs), and the outcomes associated with alterations in social and emotional abilities (Kollas & Kollas, 2016). For these reasons, the various facets of survivorship care planning, which include conversations about exercise rehabilitation, are fundamental to the future health outcomes of cancer survivors.

Exercise rehabilitation is an effective way to mitigate assorted impairments and deconditioning that can develop in relation to treatment recovery to prevent progression to a potentially deleterious level. Exercise rehabilitation programs empower patients to improve functional capacity and achieve holistic health goals (YMCA of the Fox Cities, 2017). The YMCA, in partnership with the Livestrong Foundation, has a well-established exercise rehabilitation program, Livestrong<sup>®</sup> at the YMCA, that has served more than 55,500 cancer survivors in more than 650 communities nationwide (Livestrong Foundation, 2018). The 12-week program takes place twice weekly, with sessions lasting about 75 minutes. Trained professionals lead group-based activities with individualized exercise prescriptions that focus on cardiovascular conditioning, strength training, balance, and flexibility. Because of grants and ancillary funding, all individuals who participate in the