Physical Activity Preferences Among a Population-Based Sample of Colorectal Cancer Survivors

Erin L. McGowan, PhD, Amy E. Speed-Andrews, PhD, Chris M. Blanchard, PhD, Ryan E. Rhodes, PhD, Christine M. Friedenreich, PhD, S. Nicole Culos-Reed, PhD, and Kerry S. Courneya, PhD

Physical activity (PA) improves quality of life and disease outcomes in survivors of colorectal cancer (CRC) (Sellar & Courneya, 2011). Unfortunately, the benefits of PA can only be realized through regular participation (Courneya & Friedenreich, 1999). Not surprisingly, research has found that CRC survivor PA participation rates decline during treatment and may never regain prediagnosis levels (Courneya & Friedenreich, 1997a, 1997b). For example, in a population-based sample of Canadian cancer survivors (any type), Courneya, Katzmarzyk, and Bacon (2008) found that fewer than 22% of the survivors were sufficiently physically active to meet public health guidelines, with female (14%) and male (20%) CRC survivors reporting some of the lowest PA rates. In an American representative sample, only 35% of CRC survivors were meeting PA recommendations (Blanchard, Courneya, & Stein, 2008). Finally, in a cross-sectional study of 413 CRC survivors, only 26% of participants were meeting PA guidelines (Peddle, Au, & Courneya, 2008). These studies demonstrate that a substantial proportion of CRC survivors are not meeting PA guidelines and, therefore, are not sufficiently active to obtain health benefits.

Given the established benefits of PA and the low participation rates, a need exists to increase PA in cancer survivors. Understanding PA preferences would facilitate the design of optimal PA promotion (e.g., modality, frequency, location, delivery method) for cancer survivors. In addition, as proposed by most social cognitive models of human behavior (e.g., Theory of Planned Behavior), preferences will influence motivation and adherence (Ajzen, 1991). Several studies have examined PA and exercise preferences in a variety of cancer survivor groups, such as endometrial (Karvinen et al., 2006), head and neck (Rogers, Malone, et al., 2009), bladder (Karvinen, Courneya, Venner, & North, 2007), brain (Jones et al., 2007), kidney (Trinh, Plotnikoff, Rhodes, North, & Courneya, 2011), and breast (Holloszy, Dwyer, & Greendale, 2004). These studies have found varying levels of PA and exercise preferences among cancer survivors. Understanding these preferences can help in the development of personalized PA interventions for CRC survivors.

Purpose/Objectives: To identify the key physical activity (PA) programming and counseling preferences of colorectal cancer (CRC) survivors.

Design: Population-based, cross-sectional mailed survey.

Setting: Alberta, Canada.

Sample: 600 CRC survivors.

Methods: CRC survivors randomly identified through the Alberta Cancer Registry in Canada completed a mailed survey (34% response rate).

Main Research Variables: Self-reported PA, medical and demographic variables, and PA preferences.

Findings: Most CRC survivors indicated that they were interested and able to participate in a PA program. The most common PA preferences of CRC survivors were to receive PA counseling from a fitness expert at a cancer center, receive PA information in the form of print materials, start a PA program after cancer treatment, do PA at home, and walk in both the summer and winter. In addition, oncologists and nurses were identified as preferences from whom CRC survivors would like to receive PA information. Chi-square analyses identified that age, education, annual family income, and current PA were the demographic variables most consistently associated with PA preferences.

Conclusions: The majority of CRC survivors expressed an interest in participating in a PA program and key PA preferences were identified. Those preferences may be useful for developing and implementing successful PA interventions for CRC survivors.

Implications for Nursing: Oncology nurses are in a unique position to promote PA for CRC survivors. Therefore, understanding CRC survivor PA preferences is essential to assist nurses in making appropriate PA recommendations or referrals.

Knowledge Translation: Although CRC survivors’ PA participation rates are low, they may have an interest in receiving PA programming and counseling. CRC survivors have indicated a preference to receive PA information from individuals within their cancer support team (e.g., fitness specialist at a cancer center, oncologist, nurses). The PA preferences identified by CRC survivors are important for the development of successful PA interventions.