

# Exercise Preferences Among Men With Prostate Cancer Receiving Androgen-Deprivation Therapy

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About a third of the 2 million prostate cancer survivors in the United States receive androgen-deprivation therapy (ADT) (Michaelson et al., 2008), not only as adjuvant treatment for early, localized prostate cancer, but as treatment for recurrent prostate cancer. Strong evidence shows an association between ADT and adverse changes in body composition and osteoporosis, as well as an increased risk of insulin resistance, diabetes, and cardiovascular disease (Basaria et al., 2002; Basaria, Muller, Carducci, Egan, & Dobs, 2006; Braga-Basaria et al., 2006).

A growing body of evidence supports the integration of physical activity as an intervention that may reverse or at least mitigate the adverse changes associated with ADT (Galvão, Taaffe, Spry, Joseph, & Newton, 2009; Galvão, Taaffe, Spry, & Newton, 2007). Correspondingly, the detrimental effects of physical inactivity are equally recognized. A meta-analysis conducted by Qaseem et al. (2008) identified physical inactivity as a significant risk factor for osteoporosis.

Although incorporation of physical activity has received widespread endorsement from a number of professional societies, such as the National Osteoporosis Foundation (2013), the American College of Sports Medicine (ACSM) and American Heart Association (AHA) (Nelson et al., 2007), the American Diabetes Association (Funnell et al., 2010), and the National Cholesterol Education Program–Adult Treatment Panel III (Grundy, Brewer, Cleeman, Smith, & Lenfant, 2004), evidence suggests that recommended goals for physical activity are not being met among cancer survivors. A meta review of 65 exercise studies was conducted to evaluate study uptake, completion, and adherence among patients with cancer (Maddocks, Mockett, & Wilcock, 2009). The findings indicate that about two-thirds of patients accepted an offer for an exercise intervention, and only half completed the exercise program. The authors concluded that exercise programs must be

**Purpose/Objectives:** To investigate acceptability of and preferences for physical activity participation in men receiving androgen-deprivation therapy (ADT) for prostate cancer, to identify influencing clinical and demographic factors, and to determine the percentage meeting national exercise guidelines.

**Design:** Cross-sectional, descriptive.

**Setting:** Ambulatory care clinic of a large medical center.

**Sample:** 135 men receiving ADT.

**Methods:** A structured interview with a systematic procedure was used to elicit preferences for physical activity.

**Main Research Variables:** Exercise preferences and acceptability; evidence-based exercise intervention.

**Findings:** Participants expressed high levels of acceptability of and willingness to participate in aerobic (64% and 79%) and muscle-strengthening (79% and 81%) programs. Preferences were expressed for muscle-strengthening activities performed at home, either alone or in the company of a family member. Flexible, spontaneous, and self-paced programs were preferred. Significant associations were identified for distance, age, obesity, duration of ADT, and meeting American College of Sports Medicine (ACSM) and American Heart Association (AHA) guidelines. Nineteen percent of the study population met the guidelines for weekly physical activity.

**Conclusions:** High levels of expressed acceptance of and willingness to participate in physical activity programs as well as the small number of participants meeting ACSM and AHA guidelines suggest feasibility of and support the need for the development of exercise programs in this population.

**Implications for Nursing:** Incorporating patient preferences and evidence-based practice is integral to providing high-quality patient-centered care and is the foundation for appropriate intervention programs. Insight from this study will facilitate the design of programs that better reflect actual preferences of prostate cancer survivors.

**Knowledge Translation:** ADT-induced changes in body composition are believed to contribute to a reduction in insulin sensitivity and dyslipidemia that contribute to increased cardiovascular risk profile. Exercise has the potential to mitigate the harmful effects of ADT.