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A prescription for better health: exercise after prostate cancer

April 16, 2015 6.36am AEST

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Many men living with prostate cancer are confronted with significant bodily changes that can make exercising difficult. Ivonne Wierink/Shutterstock

Prostate cancer is the most commonly diagnosed male cancer in Australia, with around 20,000 cases detected each year.

Depending on the type of treatment, many men living with prostate cancer are confronted with significant changes in their body composition. These can lead to generalised muscle weakness, fatigue and depression. This can make exercising difficult, particularly if it wasn’t part of their routine before diagnosis.

Androgen deprivation therapy or hormone therapy is commonly prescribed to reduce levels of male hormones, such as testosterone, to prevent the spread of prostate cancer.

Testosterone assists in maintaining heart, metabolic and muscular health, as well as sexual function. Hormone therapy can therefore have a profound impact on physical functioning, bone loss, muscle loss and fat gain. This results in an increased risk of falls and fractures, and a reduced quality of life.
Men with prostate cancer are also at increased risk of dying from other illnesses, including heart disease, diabetes and osteoporosis, which may be prevented or reduced through exercise.

**Exercise programs** for men with prostate cancer can maintain and improve muscle mass and strength, cardio-respiratory fitness and mental health outcomes, including reduced emotional distress, depression and anxiety.

**Exercise and Sport Science Australia** recommends people living with cancer exercise at a moderate to vigorous intensity level three to five times per week for at least 20 minutes per session. The guidelines recommend including aerobic, resistance (using weights, weight machines, or resistance bands) or mixed exercise to improve cardiovascular health, endurance, muscle and bone health and to reduce excess weight.

Increasing age, other health conditions, cancer stage and side effects of treatment influence the amount and type of exercise men living with the condition can participate in.

![Exercise physiologists tailor exercise treatments around the patient's side effects and monitor their activity to reduce the risk of injury. Deakin University](image)

Despite the benefits of exercise for cancer survivors, this knowledge has not been translated into practice. Many men living with prostate cancer are uncertain about the type and amount of exercise they should participate in. Most do not recall receiving information from clinicians about integrating exercise into their lives.

Clinicians may not view their role as health promotion advocates, with 55% reporting "not having enough time" or a "lack of knowledge/resources" as the most common barriers to promoting physical activity to their patients. Clinicians don’t usually refer patients to supervised exercise programs following a cancer diagnosis.

Our research team suspected that if men were referred to exercise physiologists, they would gain the confidence and skills to start exercising and improve their health.

Exercise physiologists are university-trained and accredited therapists who can assist people with chronic health conditions. They tailor exercise treatments around the patient’s side effects, such as incontinence and decreased bone density, and monitor the patient’s activity to reduce their risk of injury.

We designed a referral process, using a form similar to a prescription (right), to formalise the recommendation by
clinicians for patients to participate in the exercise program. 
Our research is published today in the journal Cancer.

A clinician-based recommendation and referral has a number of distinct advantages over traditional approaches to exercise promotion. Patients are likely to take notice of a recommendation about exercise when it is from a trusted source, such as their treating clinician. The referral is also quick and easy for busy clinicians who are seeing many patients, often with multiple health conditions.

We recruited men with prostate cancer to participate in an exercise program at their local YMCA. This was supervised by exercise physiologists and tailored to their individual capabilities, with endorsement by their trusted medical or nurse clinician.

We found that men who participated in the 12-week program (of two gym-based and one home-based session per week) undertook more than twice as much vigorous exercise (such as jogging on a treadmill, cycling and/or resistance training), compared with men in the control group. They were nearly four times more likely to meet the exercise guidelines (around 150 minutes per week) and nearly five times more likely to avoid complete inactivity.

Men in the exercise group were more alert and had fewer symptoms of depression. Most participants said it was rewarding and extremely beneficial to their health and well-being. Importantly, more than 80% achieved their exercise goals.

Clinicians also found referring patients to the exercise program simple and straightforward.

Combining a clinician’s referral to a tailored exercise program, which is planned, delivered and supervised by exercise physiologists, can significantly improve health outcomes for men with cancer.

If you’re living with prostate cancer, talk to your GP about increasing your exercise levels and, if needed, ask for a referral to an exercise physiologist. Medicare provides access to subsidised treatment from health practitioners, such as accredited exercise physiologists, with a referral from a GP.