Physical activity levels in men with bone metastatic prostate cancer and associations with physical and mental health outcomes

Eva Zopf  
*Edith Cowan University*

Robert U. Newton  
*Edith Cowan University*

Dennis R. Taaffe  
*University of Wollongong, dtaaffe@uow.edu.au*

Nigel Spry  
*Edith Cowan University*

David Joseph  
*Edith Cowan University*

*See next page for additional authors*

Publication Details  
Physical activity levels in men with bone metastatic prostate cancer and associations with physical and mental health outcomes

Abstract
Abstract of a presentation at the 2nd Prostate Cancer World Congress (PCWC), Cairns, Australia, 17-21 August 2015.

Disciplines
Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

Authors

This journal article is available at Research Online: http://ro.uow.edu.au/smhpapers/3258
Physical activity levels in men with bone metastatic prostate cancer and associations with physical and mental health outcomes

Eva M Zopf1, Robert U Newton1,2, Dennis R Taaffe3, Nigel Spry1,4, David Joseph1,4, Suzanne Chambers1,2, Prue Cormie1, Freerk T Baumann5, Wilhelm Bloch 5 and Daniel A Galvao1

1Edith Cowan University Health and Wellness Institute and School of Exercise and Health Science, Edith Cowan University, Joondalup, Australia
2University of Queensland Centre for Clinical Research, University of Queensland, St Lucia, Australia
3School of Medicine, University of Wollongong, Wollongong, Australia
4Department of Radiation Oncology, Faculty of Medicine, Sir Charles Gairdner Hospital, Nedlands, Australia
5Institute of Cardiovascular Research and Sport Medicine, Department of Molecular and Cellular Sport Medicine, German Sport University Cologne, Cologne, Germany

Objective: To provide initial information on the prevalence of physical activity levels in prostate cancer patients with bone metastases and identify associations with physical and mental health outcomes.

Methods: Self-reported physical activity levels (Modified Godin Leisure-Time Exercise Questionnaire), physical and mental health outcomes (SF-36 Questionnaire), as well as objective physical performance measures (400 m walk, 6 m walk) were assessed in 48 prostate cancer survivors (mean age 70.7 _ 8.0; BMI 28.5 _ 4.2; PSA 52.7 _ 154.1) with bone metastases (58.8% >2 regions affected) at baseline of a randomised controlled trial.

Results: Only 14 men (29.2%) met the current aerobic exercise guidelines (150 min of moderate intensity or 75 min of vigorous exercise per week or an equivalent combination), while 34 (70.8%) were insufficiently active. Men that were not meeting the aerobic exercise guidelines, had lower physical functioning (p < 0.01), role functioning (physical and emotional; p < 0.05), and general health scores (p < 0.05). The 6 m walk (fast pace) and 400 m walk times were also slower, indicating reduced physical performance in men who were insufficiently active compared to those meeting aerobic exercise guidelines (p < 0.05).

Conclusions: Lower levels of aerobic exercise are associated with reduced physical and mental health outcomes in prostate cancer survivors with bone metastases. While previous research has focused primarily on non-metastatic cancer patients, our initial results suggest that meeting aerobic exercise guidelines may preserve health outcomes in prostate cancer patients with advanced bone metastatic disease. Further research is required to confirm and expand these findings.