

THE UNIVERSITY OF WESTERN AUSTRALIA

Exercise Oncology Exercise for the cancer patient

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Who Am Ben Kramer (He/him)

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- Associate Lecturer, UWA, Clinical Ex. Physiology
- Clinical Practioner working in Ex Oncology since 2018
- Honours in Exercise Oncology







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Clinical Oncology Society of Australia

COSA POSITION STATEMENT **ON EXERCISE IN CANCER** CARE

Endorsed by Medical **Oncology Group of** Australia, Cancer Council Australia, Exercise and Sports Science Australia, and Australian Physiotherapy Association

EXERCISE SHOULD BE PRESCRIBED AS PART OF **ROUTINE CANCER CARE** All health care professionals involved with the care of people with cancer should:

- TREATMENT FOR CANCER
- PRESCRIBE EXERCISE TO ALL PEOPLE WITH CANCER
- CANCER CARE.

DISCUSS EXERCISE AS AN ADJUNCT

 REFER PATIENTS TO AN EXERCISE SPECIALIST WITH EXPERIENCE IN



"Execise as adjunct treatment for cancer"

The Role of Exercise

"Exercise training and testing is generally safe for cancer survivors and that every survivor should avoid inactivity"

Chemo/Hormone Treatment= Fatigue Quality of Life **Physical Function**

Campbell, K. et al., (2019). Exercise Guidelines for Cancer Survivors Medicine & Science in Sports & Exercise 51(11), 2375-2390.



Cancer the cycle of functional decline



Physical Activity

E.D. Hacker et al. / Biol Blood Marrow Transplant 23 (2017) 659–669



Treatment Related Deconditioning



E.D. Hacker et al. / Biol Blood Marrow Transplant 23 (2017) 659–669

Lucía, A., Earnest, C., Pérez, M. (2003). Cancer-related fatigue: can exercise physiology assist oncologists? The Lancet Oncology 4(10), 616-625.

Furzer, B., Ackland, T., Wallman, K., Petterson, A., Gordon, S., Wright, K., Joske, D. (2016). A randomised controlled trial comparing the effects of a 12-week supervised exercise versus usual care on outcomes in haematological cancer patients Supportive Care in Cancer 24(4), 1697-1707



Breaks the cycle

Physical RE-conditioning:

"Prescribe exercise to all people with cancer"

Treatments for Cancer Patients



When facing all of this alongside a life-threatening illness, recommending additional physical activity may seem to be unnecessarily burdensome, as it would require an investment of time and energy from the patient.

Treatments for Cancer Patients



Cancer Related Health Outcomes



Treatments for Cancer Patients

Anxiety & Depressive Symptoms

Fatigue

Health Related Quality of Life

Lymphoedema

Physical Function

Bone Health

Sleep

- Cardiotoxicity, Peripheral neuropathy,
- cognitive function, falls, Nausea, Pain,
- Sexual Function, Treatment tolerance

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2019 Exercise Guidelines for Cancer Survivors: Consensus Statement from International Multidisciplinary Roundtable.

Expected benefits for different types of exercise

Aerobic only	Resistance only	Aerobio Resista
Reduced anxiety	Less fatigue	Reduce
Fewer depressive symptoms Less fatigue Better QoL	Better QoL No risk of exacerbating lymphedema Improved perceived physical function	Fewer of sympto Less fat Better (
Improved perceived physical function		Improv perceiv functio

Campbell KL, Winters-Stone KM et al, Med Sci Sport Ex 2019; DOI: 10.1249/MSS.0000000000002116

- plus nce
- d anxiety
- depressive
- ms
- igue
- QoL
- ed
- ed physical



Aerobic exercise 3x/week 30 mins per session Moderate intensity



Resistance exercise 2-3x/week 30 mins per session 2-3 sets, large muscle groups



Cancer Causes Control (2007) 18:881–894 DOI 10.1007/s10552-007-9033-5 ORIGINAL PAPER	ivers: data from an Australia
Health behaviors of cancer sur population-based survey heth G. Eakin · Danny R. Youlden · Peter	D. Baade · S. Heyworth ·
Elizabeth & Lawler · Marina - Sheleigh P. Lawler · Marina - Lin Fritschi	

Published online 18 June 2015 in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/pon.3882 Compliance to exercise-oncology guidelines in prostate cancer survivors and associations with psychological distress, unmet supportive care needs, and quality of life Daniel A. Galvão¹, Robert U. Newton¹, Robert A. Gardiner^{1,2,3}, Afaf Girgis⁴, Stephen J. Lepore⁵, Anna Stiller⁶,

34. Eakin, E.G., et al., Health behaviors of cancer survivors: data from an Australian population-based survey. Cancer Causes Control, 2007. 18(8): p. 881-94. 35. Short, C.E., et al., Main outcomes of the Move More for Life Trial: a randomised controlled trial examining the effects of tailored-print and targeted-print materials for promoting physical activity among post-treatment breast cancer survivors. Psychooncology, 2015. 24 (7): p. 771-8. 36. Galvao, D.A., et al., Compliance to exercise-oncology guidelines in prostate cancer survivors and associations with psychological distress, unmet supportive care needs, and quality of life. Psychooncology, 2015. [Epub ahead of print].

The Gap

an





In Australia Approximately 60-70% of people with cancer do not meet aerobic exercise guidelines

Approximately 80-90% do not meet resistance exercise guidelines

34. Eakin, E.G., et al., Health behaviors of cancer survivors: data from an Australian population-based survey. Cancer Causes Control, 2007. 18(8): p. 881-94. 35. Short, C.E., et al., Main outcomes of the Move More for Life Trial: a randomised controlled trial examining the effects of tailored-print and targeted-print materials for promoting physical activity among post-treatment breast cancer survivors. Psychooncology, 2015. 24 (7): p. 771-8. 36. Galvao, D.A., et al., Compliance to exercise-oncology guidelines in prostate cancer survivors and associations with psychological distress, unmet supportive care needs, and quality of life. Psychooncology, 2015. [Epub ahead of print].



Low Self-Confidence

Low Self-motivation Past Experience **Barriers to Exercise** Access

Knowledge of Benefit

Time, Scheduling

Clifford, B. K., Mizrahi, D., Sandler, C. X., Barry, B. K., Simar, D., Wakefield, C. E., & Goldstein, D. (2018). Barriers and facilitators of exercise experienced by cancer survivors: a mixed methods systematic review. Supportive Care in Cancer, 26, 685-700.

Hayes, S. C., Newton, R. U., Spence, R. R., & Galvão, D. A. (2019). The Exercise and Sports Science Australia position statement: exercise medicine in cancer management. Journal of science and medicine in sport, 22(11), 1175-1199.

Craike, M.J., Hose, K., Courneya, K.S. et al. Perceived benefits and barriers to exercise for recently treated patients with multiple myeloma: a qualitative study. BMC Cancer 13, 319 (2013). https://doi.org/10.1186/1471-2407-13-319

Why Don't Patients Exercise

Low Nutritional Intake

Fatigue

Fear of Infection

FEAR OF EXACERBATING SIDE EFFECTS

Other Treatment Side effects

Pain



Getting Patients Exercising

"When and How"

Exercise across the treatment timeline.



Sometimes tailored exercise with health professionals is not a feasible option (accessibility, competing health priorities, fatigue etc.).

<u>Regardless, patients should always be encouraged to AVOID INACTIVITY.</u>

Exercise is safe and feasible across the treatment timeline WHEN managed or guided by an appropriate professional.

<u>ARM Your Patients: Facilitating Exercise and Activity</u></u>

Interventions are most successful when the whole team is onboard. It conveys a sense of greater importance the more it is reinforced.





Monitor (ongoing)

The Role of the Whole Team

ARM Your Patients: Facilitating Exercise and Activity



- Assess current PA and exercise levels.
- Advise patients of the broader role of PA and exercise in the management of cancer specific symptoms (fatigue, poorer physical function, etc).
- Advise patients when they are not meeting recommended activity levels.

The Role of the Whole Team

ARM Your Patients: Facilitating Exercise and Activity



- Patients need a referral to appropriate exercise intervention.
- Have a network of trusted providers.
- Refer with a list of concerns if you have any.
- The willingness to discuss exercise with the patient and refer the patient onwards shows the practitioner's confidence in the benefits of exercise.

The Role of the Whole Team

ARM Your Patients: Facilitating Exercise and Activity



- Regular evaluation of activity levels is needed.
- Regular follow-up, monitoring progress (or lack thereof) at subsequent visits.
- Each of these other steps should be repeated at regular intervals.
- Referral may be required at a later date if condition declines.

"Referral to exercise specialists with experience in cancer care"

Who	 Accredited Exercise Physical Accredited Exercise Physical Accredited Exercise Physical Acceleration of the the term of te
what	 Trained to design and deliver ex includes specific training in exer
	 Model of therapy includes comp
	Trained in behaviour change an
Where	• Exercise and Sports Science Austr
	Cancer Council and other support

Finding An Exercise Expert

Best practice cancer care to include referral to an accredited exercise physiologist and/or physiotherapist with experience in cancer care

siologists

h Professional. c intervention modality to assist an individual in recovering function, health or

cercise interventions for patients with chronic and complex conditions. This rcise oncology.

prehensive assessment, monitoring and multidisciplinary practice.

d health coaching principles to support lifelong activity

ralia (ESSA)

rt services







School of Human Sciences

UWA Exercise and Performance Centre

Where Are We!

OR Find an AEP at the link Below https://www.essa.org.au/Shared_Content/Smart-Suite/Smart-Maps/Public/Findan-AEP.aspx?WebsiteKey=b4460de9-2eb5-46f1-aeaa-3795ae70c687

Look for the green flag!









Patients can lodge an enquiry via this QR Code

School of Human Sciences

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You can Lodge a referral on behalf of the patient via this QR Code



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Thank you !

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UWA Exercise & Performance Centre https://www.uwa.edu.au/facilities/uwa-exercise-and-performance-centre

