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Effect Of An Exercise Counselling Clinic On Exercise Behaviour In Men With Prostate Cancer.

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Prostate cancer (PC) treatments can result in long-term side effects that impact physical function and quality of life. Exercise has been shown to be a safe and effective strategy to reduce and manage treatment side effects; however, very few PC survivors are sufficiently active and providing supervised exercise programming is not feasible in many clinical settings. To address this need, the Prostate Cancer Supportive Care (PCSC) Program implemented an exercise counselling clinic led by a certified exercise physiologist that focused on facilitating exercise behaviour change.

PURPOSE: To evaluate if an exercise counselling clinic can improve the aerobic and resistance exercise levels in men with PC, to align with the exercise oncology guidelines.

METHODS: Participants of the PCSC Program were invited to attend an exercise counselling clinic as part of their regular PC clinical care, namely 4 x 45-minute one-on-one sessions over 12-months (baseline, 3-, 6- and 12-months). At each session, the total amount of aerobic and resistance exercise, current PC treatments, physical symptoms and readiness for change were recorded using self-report questionnaires and a guided interview. A retrospective chart review was performed from data collected between July 2015 (clinic inception) and September 2017

RESULTS: 128 men (age = 67.6 ± 7.0) attended the clinic at baseline. 93 of these men attended 2 or more visits and were analyzed further. 55% were currently receiving treatment or had received it in the past 6-months. Attendance was 73% at the 6-month follow-up and dropped to 36% at 12-months. Compared to baseline, there was an 18% increase in men meeting aerobic exercise guidelines (62%, p<0.01), 26% increase for resistance training guidelines (47%, p<0.01) and 22% increase for both aerobic and resistance training guidelines (39%, p<0.01). At baseline, the vast majority of men were in the preparation, action or maintenance stage of change (41%, 13% and 40% respectively).

CONCLUSION: An exercise counselling clinic can significantly improve aerobic and resistance exercise levels in men with PC and improve adoption of the exercise oncology guidelines. Future work will focus on duration and intensity of support required to increase long-term behaviour change and target men with PC who are not meeting exercise oncology guidelines.

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Exercise Prescription in Cancer Survivors: What Explains Poor Retention?

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There are approximately 13 million cancer survivors in the U.S.; fewer than 10% meet the exercise recommendations outlined by the American College of Sports Medicine. Poor adherence is likely explained by a variety of factors. If we can identify these factors, we may be able to tailor the prescription, monitoring, and encouragement of exercise more effectively.

PURPOSE: To determine variables that influence retention in an exercise trial on cancer survivors.

METHODS: We enrolled 157 cancer survivors in an exercise program lasting 10 weeks and consisting of biweekly cardiovascular, strengthening, and flexibility components. At baseline and following the intervention, we assessed anthropometric and cardiovascular profiles, health and cancer history, and physical functioning. Chi-square and logistic regression analyses tested variables associated with program completion.

RESULTS: We retained 37.7% of patients through follow-up. Women were more likely to complete the trial (43.2%) than men (19.4%; p=0.010). Differences between cancer type were minimal. Adherence was better among breast cancer patients (p=0.016) but this was attributable to sex; there was no difference among patients with multiple cancers (p=0.583) or patients who had a previous heart attack (p=0.691) or stroke (p=0.528), had diagnosed hypertension (p=0.513) or pulmonary disease (p=0.199), were obese (p=0.893), or smoked (p=0.333). Fatigue (p=0.696) and mode of treatment (surgery, chemotherapy, radiation; p>0.225) did not affect completion. There was a difference among patients with hyperlipidemia (32.4%; p=0.040). Patients with poor sit-and-reach scores were also more likely to drop out: 53.3% of patients who could reach their toes completed the program compared to 26.5% who could not reach their toes (p=0.016).

CONCLUSION: Exercise adherence is low among cancer survivors; in our sample, fewer than 40% of patients were retained through follow-up. Several factors predicted retention, but sex had the strongest association. Further efforts must be made to identify risk factors for attrition in this population. The differences observed in retention by sex suggest other cohorts may need to be stratified by sex to verify our findings.

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Effects Of Three-stage Training Program On Functional Fitness And Physical Activity For Community-dwelling Old-old Japanese

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PURPOSE: To examine the effectiveness of a three-stages physical training program on ADL-related functional fitness and daily physical activity for community-dwelling old-old Japanese women.

METHODS: After giving written informed consent, the subjects, unable to stand on one leg for more than 20 seconds with eyes open, were divided into a 3 times/week group (HFG; 13 females, 81.5±2.7 yrs, BMI 22.8±1.6) and a 1time/week group (LFG; 10 females, 81.7±3.2 yrs, BMI 21.9±1.3). The program was composed of three stages for 16 weeks. First, participants learned about management skill for their physical soreness and asked to stand on one-leg with eyes open for one minute, 3 times a day for each leg at class and at home. Second, they learned to strengthen their core and lower leg muscle using an elastic band. The last stage was to learn a three-minute arm and leg combined exercise program with music. ADL-related functional fitness(sitting & standing time, zigzag walking time), one-leg standing time with eyes open, and knee extension strength were obtained. Balance ability was measured by the area covering and total length of the center of gravity sway(COP). Each measurement item was assessed before and after the intervention period. Daily physical activity was measured by pedometer in the first and last 7days during the intervention period. Student's T-test and two-way repeated measures ANOVA were used to test the effectiveness.

RESULTS: The class participation were 82±4% and 81±8% respectively. Sitting & standing time (HFG: 18.4±5.6 to 16.3±5.1 sec., LFG: 17.4±3.9 to 17.7± 3.6sec. F=3.573, P=0.073), zigzag walking time (HFG: 19.2±2.9 to 17.2±4.2sec., LFG: 16.6±3.1 to 16.8±2.9sec, F=11.88,P=0.002), one-leg standing time with eyes open (HFG: 6.1±3.1 to 13.7±4.2 sec., LFG: 5.9±2.3 to 6.1±1.8sec, F=30.69,P=0.000), knee extension strength(P=0.040), and balance ability (area covering of COP; F=13,58, P=0.001, total length of COP; F=21.00, P=0.022), daily steps (HFG: 3864±747 to 4454±632steps, LFG: 3831±832 to 4001±860steps, F=5.28,P=0.032) also improved significantly in HFG.

CONCLUSIONS: Three-stage physical training program was effective for functional fitness and daily physical activity by old-old Japanese females.