



Research Week 2021

Reporting Adherence to Resistance Training in Cancer Survivors and their Partners: A Comparison Between Prescribed and Received Training Dose

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Abstract

Introduction

The EXERCISING TOGETHER© trial is studying a partnered exercise program for cancer survivors and their partners (NCT03630354). It is unknown if and how including partners may affect adherence to exercise programming. Additionally, conventional reporting guidelines in exercise oncology adherence were derived from reported trial methods, not reflective of actual dose received.

Purpose

To determine impact of exercise adherence by comparing training dose (prescribed vs received).

Methods

25 participants, including breast cancer survivors (n=13) and their partners (n=12), completed strength training sessions twice weekly for 6 months in one of two study arms: 1. Survivor and partner exercised together, partnered group (PG) or 2. Survivors and partners exercised independently, separate group (SG). We compared prescribed volume for two exercises, chair stands and step-ups, to self-reported volume. Prescribed training dose was individualized using weighted vests. Weight increased by 2% increments relative to bodyweight every 4 weeks or if participants exceeded repetition maximums. Prescribed training volume (PTV) and received training volume (RTV) was calculated and reported as percent adherence of overall sample to prescribed training $((RTV / PTV) * 100)$ and adherence based on role (survivor/partner) and study arm. Comparisons between role and study arm were completed using two sample t-tests.

Results

Overall adherence to training averaged 72.6% for chair stand and 70.5% for step-ups. There was no significant difference in adherence between SG and PG. Stratified analysis suggests survivor adherence improves and partner adherence decreases when exercising together.

Conclusion

Preliminary analysis suggests breast cancer survivors may benefit when partners are involved in exercise, but that, in turn, may come at the expense of the partners benefit from exercise. Initial data analysis was underpowered to see significant differences in adherence between study arms. Future analyses can examine received dose of exercise in relation to participant benefits to determine the full implications of these observations.