Physical Activity and Self-Management During Treatment for Breast Cancer: Results from the NEXT-BRCA Trial

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Introduction

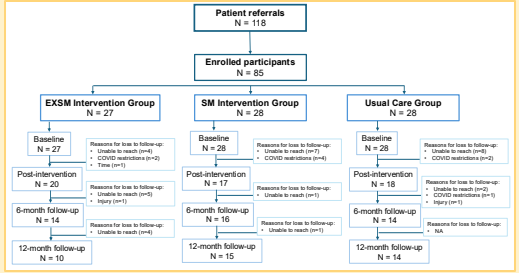
- Physical activity (PA) improves physical and psychosocial side effects of breast cancer (BRCA) treatments.
- PA programming is not accessible to all BRCA survivors and more than 70% of this population is not meeting current PA guidelines.
- Self-management (SM) education empowers individuals to take control over their health and includes components of action planning.
- Implementation strategies are needed to determine how to implement PA and SM into cancer care in Canada.

Purpose

The purpose of this study was to determine the feasibility and effectiveness of institution-based PA and SM compared to usual care in improving outcomes for individuals with BRCA receiving treatment.

Methods

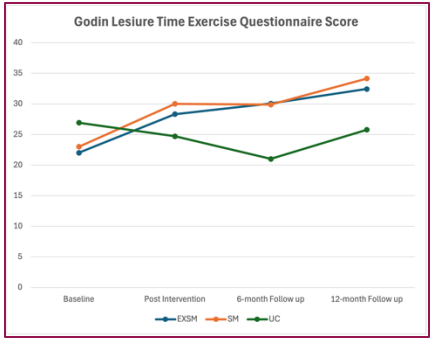
- A hybrid implementation-effectiveness study was conducted.
- Participants (n=85) included: (1) females (2) with a current diagnosis of BRCA (3) undergoing treatment.
- Participants were randomized to:
- ***Exercise and self-management*** (EXSM; 8 sessions of moderate intensity exercise and SM education), ***SM only*** (8 virtual sessions of SM education), or ***usual care***.
- Recruitment, retention, and adherence rates determined feasibility.
- An ANCOVA was used to determine effectiveness of the intervention on PA levels, function, and quality of life (QOL) over 1 year.



Results

- Eighty-five participants enrolled in the study. Most were 40-60 years of age (56%), living with stage 2 BC (46%), and receiving chemotherapy (68%).
- ***Feasibility Outcomes:***
- The intervention was found to be feasible (recruitment rate of 72%, retention rates of 75% (EXSM) and 93% (SM), and adherence rates of 76% (EXSM) and 93% (SM)).
- ***Effectiveness:***
- A significant effect of group and timepoint interaction was found for all PA level, QOL, and function outcomes.
- Regarding the primary outcome (PA level), the EXSM group and SM only group showed a significant improvement compared to UC at post-intervention, 6-month, and 12-month follow-ups (all *p*'s<0.001).
- No adverse events occurred during the intervention

Results



PA level scores at each timepoint. Significant differences found between both intervention groups and usual care.

Conclusion

PA and SM programming is feasible for individuals with BRCA during treatment in Canada and is effective in improving PA level, QOL, and function. Overall, PA implementation strategies should work towards maximizing availability and accessibility of services for this population.

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