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Conference/Meeting Name: San Antonio Breast Cancer Symposium

Location: San Antonio, TX, USA

Dates: 5th to 8th December

Presentation Type: Poster

Tower of the Americas… I prefer Sydney Tower :)

In December of 2023, I had the pleasure of attending the San Antonio Breast Cancer Symposium, facilitated by funding from Sydney Cancer Partners. This conference typically attracts close to 10,000 attendees from 100 countries and is the premier international platform for breast cancer research. Although predominantly focused on laboratory, medical and pharmacological advancements, there has been a growing interest in recent years for other aspects of cancer care, such as allied health, nursing, public health, and social work. As an exercise physiologist, I was particularly interested in key speakers from this field, such as Kerry Courneya from Canada and Anne May from the Netherlands. These general session presentations, along with several other sessions and posters, highlighted the importance of supportive care to this international medical community, not only with physical activity but also diet, psychosocial wellbeing, and many other heath determinants.

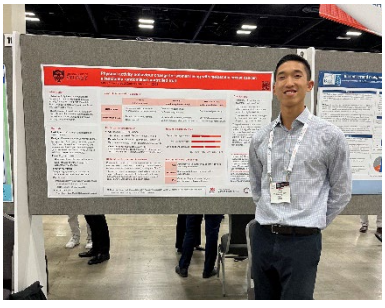
A key take-home message for me was the overwhelming need for collaboration across disciplines for better holistic care. Naturally, the majority of projects were of a single discipline, but presenters frequently expressed some desire for a multidisciplinary angle to better support their participants. Furthermore, there were several showcases of research specifically on how family members and caregivers may also need support, or how to evolve cancer services to provide more ethnically and geographically inclusive care. My personal experiences designing, conducting and evaluating research has led to some similar sentiments, and this has motivated me to advocate for such factors to be considered in any future projects I am involved with. For example, rather than being singularly focused on an exercise intervention and in a metropolitan setting, we also need to incorporate other related ancillary services and for a variety of participant contexts.

During the conference, I was also able to make some exciting connections, namely with a Swedish surgeon conducting an international exercise trial, who is considering recruiting from Sydney sites, as well as a medical oncologist on the Australian Breast Cancer Trials scientific committee, who was interested in how the next steps for my research might be funded. There was also a plethora of other well-designed and diverse research that I had an opportunity to engaging with, such as qualitative or mixed methods studies, and special interest fields such as financial toxicity, patient experiences, and how to facilitate patient-centred care. All with compelling findings, I intend to reflect upon these projects and weave similar concepts into my own future works.

Some of the other exercise-centric research on display.

Being my first international conference, it was also insightful learning about the diversity of healthcare settings from different countries. This, of course, also has a flow-on effect to the experiences of these countries' clinicians, patients and researchers. Exploring what may or may not be generalisable across countries has brought to light what we do well but also what we could do better. For example, Australia is apparently perceived to be "ahead of the curve" in certain aspects, such as incorporating patient advocacy into our research landscape, and promoting inclusivity of patient cohorts (i.e., rural contexts or indigenous health). However, I believe we that we still have plenty of room to grow! On the other hand, some European countries have much more rigorous, large-scale studies on survivorship and quality of life, which is indicative of the priorities of patients, clinicians, and research funding bodies. It would be incredible if Australian research groups could replicate such works, to first demonstrate the need and then to implement solutions, and I intend to be a part of that process.

I am pleased that my poster received interest from attendees of many different backgrounds, and I was able to describe my work to attendees from North America, Asia, Europe and Australia too. It was an absolute blast attending this conference and am very grateful to Sydney Cancer Partners for the financial assistance that made this possible.



Physical activity behaviour change for women living with metastatic breast cancer: a feasibility randomised controlled trial

San Antonio Breast Cancer Symposium 2023

Introduction

Physical activity has many benefits for people with cancer. Promoting physical activity for women living with metastatic breast cancer is more complex than those with early-stage cancer.

This trial aimed to evaluate the feasibility and efficacy of an intervention that applies behaviour change science to a physical activity recommendation.

Methods

Participants: 20 women with metastatic breast cancer.

Design: 12-week randomised controlled trial.

Intervention: Both groups received a diary, Fitbit®, and phone/video call sessions with an exercise physiologist. The intervention group received behaviour change advice in addition (see example schedule).

Feasibility outcomes:

- Recruitment, retention and adherence.
- Semi-structured interviews on the acceptability of the trial.

Efficacy outcomes:

5-day Actigraph wear, 6-minute walk distance, sit-to-stands in 30 seconds.

Questionnaires:

- International Physical Activity Questionnaire
- Patient-Specific Functional Scale
- EORTC Quality of Life-Core 30
- EORTC Fatigue-12
- Transtheoretical Model Behavioural Scales

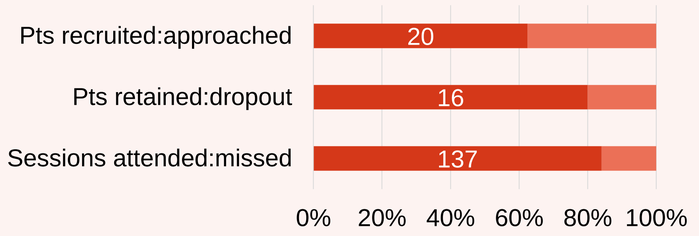
Example intervention schedule

	Week 1: Initial education	Week 2-6: Introducing the behaviour	Weeks 8, 10, 12: Embedding the behaviour
Both groups	• Recommended to be active for 150min/week at moderate intensity	• Collaborative goal setting. • Self-monitoring strategies.	• Participant-led goal setting.
Intervention group	• Benefits, motivations, barriers. • Social support.	• Motivational interviewing, feedback. • Barriers, behaviour change techniques.	• Self-reflection on progress. • Transition to self-management.

Participant characteristics

- **Age** (median, IQR): 62y (60-66)
- **Time since metastatic Dx** (median, IQR): 4y (1-5)
- **Metastatic sites**: bone (n=12), liver (n=7), lung (n=5)
- **Tx**: hormone/targeted Tx (n=14), chemotherapy (n=10)
- **Comorbidities**: musculoskeletal (n=10), cardiovascular (n=6), gastrointestinal (n=5), endocrine (n=3), oedema (n=3), immune system (n=2), other (n=3)

Results: Feasibility rates



Results: Semi-structured interviews

Participants overall had positive experiences with the trial processes (i.e., recruitment, consenting, communications), assessments, sessions, resources (i.e., diary and Fitbit®).

Changes in behaviour were perceived to be sustainable. Some participants suggested to further tailor outcome measures and sessions to each participants' personal goals, behavioural context, and health status.

Results: Efficacy (Cohen's d)

≥0.8:	Actigraphy, sit-to-stands in 30 seconds, physical function questionnaire.
0.2 to 0.8:	6-minute walk distance, physical activity questionnaire.
≤0.2:	Quality of life questionnaire, fatigue questionnaire, behavioural factors.

Conclusions

- Participants found the trial to be acceptable and beneficial.
- Recruitment, retention and adherence rates indicate that the protocol is highly feasible.
- There was also a desire for support in other health areas such as diet, sleep and psychosocial health.

This preliminary outcome data suggests that such an intervention can be clinically effective. Based on the dropout rate and variability of data, a main trial with a desired power of 0.9 (α=0.05) would need a sample size of 60 per group to detect a difference of 32m in 6-minute walk test distance.

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1. The University of Sydney, 2. Chris O'Brien Lifehouse

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