

## Physiotherapy Research Foundation

### Grant Case Study

**Researcher Name:** Robyn Brennan

**Grant Type and Year:** Seeding Grant, 2018

**Research Title:** Can pre-and post-operative pelvic floor muscle training reduce pelvic floor dysfunction in patients undergoing gynaecological cancer treatment? A pilot randomised controlled trial.

#### Background

Approximately 6,500 women were diagnosed with gynaecological cancers in Australia in 2020, with an estimated 2,000 deaths in the same year. Treatment often involves surgery, radiotherapy, chemotherapy and hormonal therapies, with a five-year survival rate of 70%. These treatments can lead to long term side effects, including pelvic floor dysfunction with associated impacts on quality of life.<sup>1</sup>

While evidence exists supporting the effectiveness of physiotherapy conservative treatment via pelvic floor muscle training as a first line treatment for urinary incontinence for women (NICE Guidelines, 2013)<sup>2</sup> specific pelvic floor physiotherapy is not routinely offered to gynaecological cancer patients.

#### About the Grant Recipient

Robyn Brennan is a Senior Physiotherapist at Monash Health, specialising in the provision of continence and pelvic floor physiotherapy. Prior to this Robyn has held positions as Clinical Lead at Women's and Men's Health and Monash Health Community Continence Centre. She is currently undertaking her PhD at Monash University.

The PRF grant is Robyn's first grant as principal researcher, having previously received one as an associate investigator.

#### Grant Impact

The grant provided funds for necessary equipment and interventions, such as sensors and ultrasound. According to Robyn, without the equipment funded by the grant, the research would have been restricted to questionnaires and suboptimal assessment methodologies, impacting the validity and reliability of the study.

As a current project, the research has been impacted by the COVID-19 pandemic. While the original study protocols using in person assessment, this has been changed to a telehealth study using a biofeedback device. The PRF grant has been invaluable in providing funds for a high-quality biofeedback device that enabled the study to continue.

The research also enabled Robyn to undertake the project on a full-time basis, with the PRF grant providing support for her successful scholarship application. She is a strong advocate for the value of PRF grants in supporting early career researchers for the support it provides them to build experience and establish themselves.

### **Outcomes and Impact**

The research is in its early stages, ongoing with results yet to be published. However, to increase awareness Robyn speaks widely about the topic. She was awarded the best paper in the women's health stream at the APA National Conference in 2019. She also presents to private practice groups about the evidence and how they can support women recovering from gynaecological cancer treatments.

Robyn has also been invited to co-author a chapter in a textbook on pelvic floor clinical therapy. This will be the first time the topic has been included in the publication, which is used internationally to teach pelvic floor physiotherapy.

Increased awareness of, and referral to, physiotherapy for treatment of pelvic floor dysfunction within medical and surgical gynaecology-oncology units following stakeholder engagement activities is also evident.

### **Looking to the Future**

Having demonstrated feasibility, Robyn would like to see the research progress to a large scale randomised clinical trial to demonstrate clinical effects. Ultimately, she hopes to see defined pathways so that "all women who've had gynaecological cancer treatment are automatically offered pelvic floor and continence physiotherapy".

1. Neron, M., Bastide, S., Tayrac, R.D. *et al.* Impact of gynecologic cancer on pelvic floor disorder symptoms and quality of life: an observational study. *Sci Rep* 9, 2250 (2019). <https://doi.org/10.1038/s41598-019-38759-5>
2. <https://www.health-ni.gov.uk/articles/nice-endorsed-clinical-guidelines-20132014>