Co-Designing and Evaluating a Digital Aerobic Exercise Program for Endometriosis: A Mixed Methods Approach

Ali Butt[2], A/Prof Chloe Taylor[2], Dr Diana Karamacoska[1], Dr Cristy Brooks[2], A/Prof Genevieve Z. Steiner-Lim[1]

1. NICM Health Research Institute, Western Sydney University, Australia
2. School of Health Sciences, Western Sydney University, Australia

BACKGROUND

- Endometriosis affects around 1 in 7 females by ages 44–49 and is associated with pain, fatigue, reduced quality of life, and psychological symptoms.
- Exercise may help symptom management, but the evidence base remains limited and exercise programs are rarely designed around the lived experiences, barriers, and preferences of people with endometriosis.
- Digital delivery may offer an accessible way to support self-management, but feasibility and acceptability need to be established.

AIM

- To co-design and evaluate a digital aerobic exercise program for women with endometriosis.
- The project aims to identify community needs and preferences, develop a patient-informed program, and examine feasibility, acceptability, and preliminary outcomes.

WHY THIS MATTERS

- Centres lived experience in intervention design.
- Supports development of an accessible, home-based digital self-management option.
- Provides feasibility data to inform future larger trials.
- May improve clinical and community support for people living with endometriosis.

STUDY DESIGN / MIXED METHODS APPROACH

PHASE 1

SCOPING REVIEW

Map the extent and characteristics of evidence on exercise-based management of endometriosis.

PHASE 2

CO-DESIGN STUDY

- Interviews and survey with the endometriosis community.
- Explore preferences, barriers, facilitators, safety concerns, and desired outcomes.

PHASE 3

10-WEEK PILOT FEASIBILITY STUDY

- Digital aerobic exercise intervention.
- Assess recruitment, adherence, acceptability, safety, and preliminary changes in pain, fatigue, mental well-being, and quality of life.

PROPOSED METHODS

Participants

Women aged 18+ with endometriosis.

Data Collection

- Scoping review of published literature.
- Qualitative interviews and online survey.
- Pilot study outcome measures before and after the intervention.

Outcomes of Interest

- Pain and symptom burden
- Fatigue
- Mental well-being
- Quality of life
- Adherence and feasibility
- Barriers and facilitators to exercise

CURRENT STATUS

- Scoping review search strategy completed.
- Protocol and OSF registration prepared.
- Ethics and study preparation underway.

TAKE-HOME MESSAGE

Co-designing a digital aerobic exercise program with the endometriosis community may improve relevance, acceptability, and future implementation.

1. NICM Health Research Institute, Western Sydney University, Australia
2. School of Health Sciences, Western Sydney University, Australia

Contact: 19211985@student.westernsydney.edu.au