

Virtual reality and psychoeducation to reduce preoperative anxiety in oncology patients: Protocol of a randomized controlled trial

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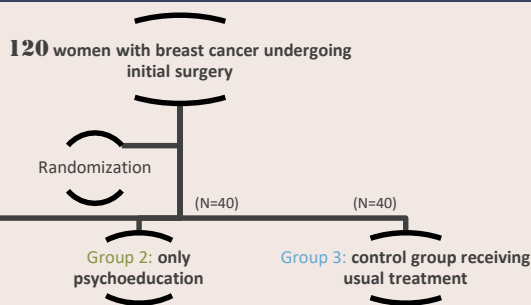
Introduction

- Many women with **breast cancer** who are scheduled for surgery suffer from **preoperative anxiety** (Majumdar et al., 2019).
- **Unmanaged preoperative anxiety** can have a **negative impact** on the **intra- and postoperative periods** (e.g., pain, increased use of analgesics and anesthetics) (Kulkarni et al., 2017; Stamenkovic et al., 2018).

This study aims to examine the benefit of the combination of two psychological tools during the preoperative phase:
psychoeducation on relaxation and relaxing environments through virtual reality (VR).

Methods

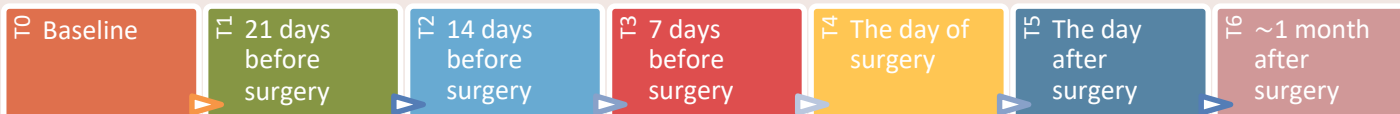
Population and groups:



Primary and secondary outcomes:

- **Preoperative anxiety, worries, and relaxation's indicators** measured by visual analog scales.
- **Perioperative experience** (e.g., pain, comfort), **heart rate, anesthetic and surgical data** (e.g., anesthesia and analgesia requirement).

Data collection:



Expected results and discussion

- Repeated measures ANOVAs including within and between-subjects factors will be performed to compare the addition of RV to psychoeducation and treatment as usual.

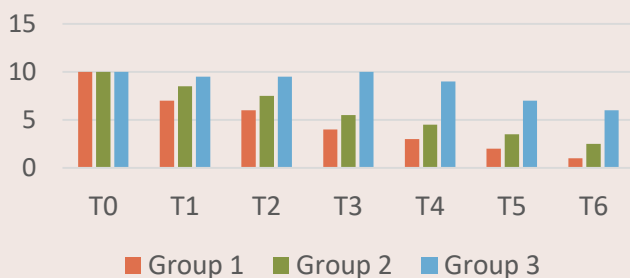


Figure 1. Hypothetical graph of average anxiety scores.

- The **combined action** of psychoeducation and VR could become a real alternative to **reduce anxiety** in women awaiting for breast cancer surgery.
- This new proactive approach may provide a much-needed, easy-to-use, non-pharmacological relaxation intervention to **improve the health of surgical patients.**