

Exploring the perspectives of older adults who are pre-frail and frail to identify interventions to reduce sedentary behaviour and improve mobility: a thematic content analysis

Isabel B. Rodrigues<sup>1\*</sup>, Priscilla Ching<sup>2</sup>, Jonathan D. Adachi<sup>1</sup>, Steven Bray<sup>3</sup>, Qiyin Fang<sup>4</sup>, George Ioannidis<sup>1</sup>, Dylan Kobsar<sup>3</sup>, Carolyn Leckie<sup>1</sup>, Alexander Rabinovich<sup>5</sup>, Alexandra Papaioannou<sup>1,6</sup>, Rong Zheng<sup>7</sup>

<sup>1</sup> McMaster University, Faculty of Health Sciences, Department of Medicine, Hamilton, ON

<sup>2</sup> Osteoporosis Canada, Patient-Oriented Research (POR), Toronto, ON

<sup>3</sup> McMaster University, Faculty of Science, Department of Kinesiology, Hamilton, ON

<sup>4</sup> McMaster University, Faculty of Engineering, Department of Computing and Software,

<sup>5</sup> McMaster University, Department of Surgery, Division of Orthopaedic Surgery, Hamilton, ON

<sup>6</sup> McMaster University, Department of Health Research Methods, Evidence and Impact, Hamilton, ON

<sup>7</sup> McMaster University, Faculty of Engineering, Department of Engineering Physics, Hamilton, ON

Older adults who are frail are one of the most sedentary and the least physically active age group. Prolonged sedentary time is associated with increased risk of negative health outcomes. To help design effective and sustainable content and optimize the uptake of sedentary behaviour interventions, an in-depth understanding of older adults' perceptions of sedentary behaviour is needed; however, most qualitative studies have been conducted in healthy older adults. The aim of this study was to explore perspectives of sedentary behaviour within the context of older adults who are pre-frail and frail after the winter and spring. We included participants if they: 1) spoke English or attended with a translator or caregiver, 2) were  $\geq 60$  years, and 3) were frail on the Morley Frail Scale. We utilized a qualitative description methodology including a semi-structured in-depth interview and thematic content analysis. Concepts from the COM-B (Capability Opportunity Motivation–Behaviour) model were used to guide the semi-structured interviews and analysis. To ensure credibility of the data, we used an audit trail and analyst triangulation. We recruited 21 older adults ( $72 \pm 7.3$  years, 13 females, 13 frail) from Southwestern Ontario, Canada. Two individuals were lost to follow-up due to medical mistrust and worse health. We transcribed 39 audio recordings. We identified three salient themes: 1) older adults rationalize their sedentary behaviours through cognitive dissonance, 2) urban cities in Southwestern Ontario may not be “age-friendly”, and 3) exercise is something people “have to do”, but hobbies are for enjoyment despite medical conditions. Perspectives of sedentary behaviour were different in the winter versus spring, with participants perceiving themselves to be less active in winter. Incorporating dissonance-based interventions may be an important component to disseminate educational material on the benefits and harms of certain types of sedentary behaviour. Future research should consider interdisciplinary collaborations with environmental gerontology to develop age-friendly communities that promote meaningful mobility to help older adults successfully age.

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