

### **P3: Physical-Frailty as impairment of the functional status in older people after a COVID-19 outbreak: Descriptive Study in a Long-Stay Facility in Chile**

**Authors:** Lidia Castillo-Mariqueo<sup>1</sup>; Alejandro Aedo Lagos<sup>2</sup>; Lydia Giménez-Llort<sup>3,4</sup>; Nefalí Guzmán Oyarzo<sup>5</sup>

1. Carrera de Kinesiología, Departamento de Procesos Terapéuticos, Facultad de Ciencias de la Salud, Universidad Católica de Temuco, Chile
2. Establecimiento de Larga Estadía para el Adulto Mayor (ELEAM) Santa Isabel de Traiguén, Chile
3. Institut de Neurociències, Universitat Autònoma de Barcelona, Barcelona.
4. Department of Psychiatry and Forensic Medicine, School of Medicine, Universitat Autònoma de Barcelona, Barcelona, Spain
5. Laboratorio de Investigación en Salud de Precisión, Departamento de Procesos Diagnósticos y Evaluación, Facultad de Ciencias de la Salud, Universidad Católica de Temuco, Chile

**Introduction:** Frailty is a common condition among older individuals and is associated with increased vulnerability to adverse health outcomes. The COVID-19 pandemic has further highlighted the impact of viral infections on frail individuals.

**Objectives:** This study assessed the functional and clinical analysis changes in frail patients before and after SARS-CoV-2. This study evaluated the functional and clinical changes in frailty patients before and after SARS-CoV-2 infection in a cohort of 20 frailty patients of a long-stay facility.

**Methods:** Demographic, clinical, and functional data, including the Barthel index, Katz index, and Mini-Mental Examination, were collected. Clinical analyses were also conducted, including a complete blood count and biochemical profile. The functional and clinical analyses were compared before and after SARS-CoV-2 infection using t-tests. Pearson's correlation was used to analyze the relationship between functionality, frailty, and clinical biomarkers.

**Results:** The cohort had a mean age of  $84 \pm 2.42$  years, with 80% female. The most common comorbidities were Arterial Hypertension, Diabetes Mellitus type II, and Alzheimer's disease. The functional assessment showed a significant increase in functional dependence on basic activities of daily living after the SARS-CoV-2 infection. Significant differences were also observed in grooming, bowel, and bladder control. Clinical biomarkers, such as albumin, showed substantial changes post-infection.

**Conclusions:** The findings indicate worsening functional dependence and changes in clinical biomarkers after an illness. These results emphasize the need for targeted interventions and support for frail individuals during viral outbreaks. Further research is warranted to explore the long-term consequences of COVID-19 on frailty and develop strategies to mitigate its impact.

**Keywords:** Frailty, COVID-19, SARS-CoV-2, functionality, disability

### **P4: Functional relationship between muscle strength, gait speed, and cognitive function in elderly people with cognitive impairment: a descriptive cross-sectional observational study**

**Authors:** Camila Pimentel; Cristófer Sáez<sup>1</sup>; Lissethe Torre<sup>2</sup>; Christian Beylé<sup>3</sup>; Sandoval Lidia Castillo-Mariqueo<sup>3</sup>

1. Carrera de Kinesiología, Facultad de Ciencias de la Salud, Universidad Católica de Temuco, Chile
2. Departamento de Psicología. Facultad de Ciencias de la Salud, Universidad Católica de Temuco, Chile
3. Departamento de Procesos Terapéuticos. Facultad de Ciencias de la Salud, Universidad Católica de Temuco, Chile