

## **Safety and feasibility of a virtual exercise programme for pulmonary fibrosis**

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Dear Editor,

Patients with pulmonary fibrosis have poor access to pulmonary rehabilitation (PR) in Ireland. This issue has returned to prominence with the recent publication of revised HSE guidance for healthcare professionals regarding the implementation of PR programmes at Specialist Ambulatory Care Hubs<sup>1</sup>. Patients with pulmonary fibrosis continue to be excluded from community-based PR services, with the updated guidance unchanged in restricting access to patients with COPD or asthma only.

There are an estimated 5,000 people in Ireland living with pulmonary fibrosis, a chronic and life-limiting lung condition typically associated with progressive breathlessness, increasing disability and deteriorating quality of life. The Irish Thoracic Society (ITS) recommends that patients with pulmonary fibrosis should have access to specialist physiotherapy and receive PR supported by a structured home exercise programme<sup>2</sup>. Research conducted in 2021 by the Irish Lung Fibrosis Association (ILFA, the national patient advocacy group for pulmonary fibrosis), showed that only 25% of the 112 pulmonary fibrosis patients surveyed had access to a physiotherapist<sup>3</sup>.

Our initiative, launched by ILFA in 2020, aimed to address the lack of accessible PR services. ILFA collaborated with University Hospital Limerick in the design and delivery of a virtual exercise programme for people with pulmonary fibrosis. A respiratory physiotherapist with expertise, skills and knowledge of pulmonary fibrosis led the online classes. Over three years (September 2021-September 2024), 9,821 participant sessions (1 hour/session) were delivered, with no reported adverse events. An online survey demonstrated high levels of satisfaction with 46/53 (87%) respondents stating they were highly likely to recommend the classes to others. Survey responses indicated that exercise classes provided substantial physical and emotional benefits to pulmonary fibrosis patients (including increased physical activity).

The programme was funded by charitable donations until 2023 and by an unrestricted grant from a commercial company in 2024 (with running costs estimated as €25,000/year). The online approach utilised in this programme was initially selected out of necessity, due to the restrictions imposed by the COVID-19 pandemic. However, virtual PR may offer advantages over traditional centre-based PR, including enhanced accessibility and scalability. The virtual exercise program's success, supported by charitable donations and corporate grants, underscores the urgent need for accessible PR. While virtual PR may offer benefits like enhanced accessibility, it should not replace the need for equitable publicly funded services.

PR has been demonstrated to improve quality of life, dyspnoea and exercise capacity in pulmonary fibrosis<sup>4</sup>. Exercise capacity is a known predictor of mortality in pulmonary fibrosis, thus the lack of PR access likely impacts long-term patient outcomes.

Pulmonary fibrosis patients deserve the same access to PR as those with COPD or asthma. We urge policymakers to make PR available to pulmonary fibrosis patients either in-person or virtually. Our experience demonstrates safety, feasibility and participant acceptability of virtual exercise training for pulmonary fibrosis, and supports further research to inform more accessible, publicly-funded PR approaches.

**Declarations of Conflicts of Interest:**

None declared.

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