

Pulmonary Rehabilitation Programme: A Transcendence During Covid-19 Pandemic

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Dear Editor,

The Covid-19 pandemic has caused disrupted scheduled care including rehabilitation services which are a key intervention for chronic disease management including respiratory diseases. Pulmonary rehabilitation (PR) has established itself as one of the most cost-effective interventions for chronic obstructive pulmonary disease (COPD) after smoking cessation and flu vaccine¹, and as effective as inhaler therapy in improving exercise capacity and reducing exacerbations as well as hospital admissions.

PR traditionally entails an exercise programme in which patients attend a hospital/community setting twice weekly classes for at least 6 weeks. However, international surveys reported that this programme is only available to a small fraction of COPD patients². In addition, many countries like Germany offer a limited 3-weekly programme due to lack of funding sourced by national health insurances.

Alternative approaches to deliver PR are much sought after to offer a cost-effective intervention and improve accessibility. However, in PR programmes, sustained effort of professionals is key to motivate and support symptomatic patients and therefore, real-time or live interaction as well as supervision are emphasized to ensure clinical effectiveness. Although further research is needed to confirm this theory, a passive PR programmes using readily available videos are unlikely to be as beneficial for patients whose sedentary behavior relates to perceived fear of respiratory symptoms, specifically shortness of breath. Recent studies reported non-inferior clinical benefits of virtual real-time PR compared to traditional PR, in addition to a decrease in the need for staffing and less travelling time for patients³.

In November 2019, an innovative virtual PR project was launched in Ireland for the first time. Based in Our Lady of Lourdes Hospital, Drogheda, a real-time and interactive 7-week PR programme was offered to patients with chronic respiratory diseases. This project utilized both resources from the Health Service Executive and the patients, in the comfort of their own home. There was 100% completion rate and all patients reporting improvement in COPD-related health indicators while 80% had an improvement in their exercise tolerance. For the first round of the programme, an estimated 1900km and 42 hours in travel expenditure was saved.

Since the Covid-19 pandemic, this innovative, award nominated initiative has gained interest nationwide leading to adaptation of a National guideline⁴. There is also international interest in the Irish National Guideline from other countries including the United Kingdom, Canada and Brazil. Continued provision of PR for chronic respiratory patients is essential to continue a scientifically proven and safe intervention to alleviate the high clinical workload on primary and secondary care at a time of social distancing and enhanced infection control in the health care system.

This virtual programme also facilitate a transcendent platform, beyond the Covid-19 pandemic, as Ireland contemplate to deliver a better health system that will incorporate telemedicine integrated with personalised care as the basis of Ireland's e-health strategy, published in 2013.

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