2.05 Pre and Post Pandemic Exercise Capacity and Symptom Burden in Chronic Obstructive Pulmonary Disease

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Background: During the COVID-19 pandemic physical and social distancing (lockdowns and cocooning) were recommended for high-risk groups including those with chronic obstructive pulmonary disease (COPD) to reduce infection risk. However, isolation can have profound effects on physical activity and mental health and may result in deconditioning.

Methods: To assess the impact of cocooning in COPD, we examined exercise capacity (six-minute walk test (6MWT) distance), symptom burden, (COPD Assessment Test (CAT)), and the Hospital Anxiety and Depression Scale (HADS) in COPD patients referred for (pulmonary rehabilitation) PR before and after the onset of the COVID-19 pandemic.

Results: A total of 160 patients with COPD undergoing assessment for PR were included, with n=118 undergoing assessment in 2018 and 2019 (pre-pandemic) and n=42 undergoing assessment in 2020 and 2021 (during/post pandemic onset). Unexpectedly, the mean 6MWT distance was significant higher in the post-pandemic group ($p<0.05$). However, this cohort reported a significantly higher symptom burden ($p<0.05$) *versus* their pre-pandemic counterparts and exhibited as a trend towards HADS score ($p>0.05$).

Conclusion: Though no reduction in exercise capacity was observed, COPD patients attending for PR assessment after the COVID-19 pandemic onset were significantly more symptomatic, with higher anxiety and depression scores than prior to the pandemic.

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