

The effect of major life changes on exercise and physical activity in people with cystic fibrosis

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Objectives

Being more physically active has important clinical benefits for people with cystic fibrosis (CF). The Covid-19 pandemic, and the widespread introduction of modulator therapies, represent two contrasting major life changes for people with CF which may have an effect on activity and exercise behaviour. The aim of this study was to identify changes in activity and exercise behaviour of people with CF following these changes.

Methods

An online survey was conducted in autumn 2022, targeted at adults (18+) with CF and parents/carers of children with CF, advertised on social media. The survey contained questions on importance of exercise, exercise behaviour before Covid-19 and modulators, use of modulators, and modifications to exercise following these life changes. Responses were a mix of closed, quantitative responses and open, qualitative responses.

Results

In total, 156 individuals (115 people with CF, 41 parents/carers) produced valid responses. On a scale from 0-10 with 0 being "not important at all" and 10 being "very important", participants rated the importance of exercise for them on average as "7" prior to the Covid-19 pandemic and modulator therapy. Following Covid-19 and modulators, exercise was less important for 13% and 17%, equally important for 60% and 66%, and more important for 37% and 18% of participants, respectively, than before the life changes. Exercise behaviour changed in 49% and 47% of respondents after Covid-19 and modulators, respectively.

Conclusion

The perceived importance of exercise remains unchanged in the majority of people with CF following the Covid-19 pandemic and introduction of modulator therapy. A greater proportion of patients perceive exercise as more important than less important. Both life changes affected exercise behaviours in approximately 50% of patients, reinforcing the continued importance of exercise and activity in the management of CF.