

Expert guidelines on exercise and physical activity for people with cystic fibrosis

Research has shown that there is a lack of confidence and understanding in how to use exercise for managing cystic fibrosis. This editorial discusses the key points of a consensus statement that highlights what is and is not known about the relationship between cystic fibrosis and exercise.

Introduction

This editorial summarises an international and multidisciplinary, expert consensus statement about the important role of physical activity and exercise for people with cystic fibrosis – a genetic condition that currently affects ~11 000 people in the UK. This work from Williams et al (2022) synthesises previous guidelines, clinical practice and interprets evidence regarding the benefits of activity and exercise for patient health and managing illness.

The study represented a capstone project of an international ‘strategic research centre’ grant from the Cystic Fibrosis Trust. The Exeter Activity Unlimited Statement involved 39 collaborators from the UK, USA, Canada, Australia, Ireland, Greece, Chile, France and the Netherlands, and included a mix of academics and clinical professionals, representing 43 different institutions.

While physical activity guidelines for healthy children, youth and adults are well established, such as the ones from the UK Chief Medical Officer (Department of Health and Social Care et al, 2019), fewer data are available to construct guidelines for people with chronic medical conditions, eg muscular dystrophy, congenital heart disease or cystic fibrosis. Therefore, the purpose of the 24-point evidence-driven document, The Exeter Activity Unlimited Statement, was to help health professionals to understand the evidence base for recommending activity and exercise to manage the individual needs of people living with cystic fibrosis. The promotion of physical activity and exercise prescription for people with complex medical conditions within a hospital setting is unfortunately not a consistent practice, although evidence shows it to be effective in disease management (Lane-Cordova et al, 2022). This consensus integrates physiological, psychological and social benefits of being physically active and provides clinical teams with a rationale to promote activity and practical suggestions to enable people with cystic fibrosis to lead a life unlimited.

Although it was not possible to explicitly quantify the frequency, intensity and duration of physical activity that people with cystic fibrosis should undertake each week, it was agreed that a ‘focus on an individualised and comprehensive training programme, undertaken at a moderate intensity [defined as a pace where the patient is able to walk/jog and be able to hold a conversation] or higher [pace where the patient can no longer hold a conversation], as part of the ongoing therapeutic routine is recommended in people with cystic fibrosis’ (Williams et al, 2022). As a starting point, this physical activity advice is suitable for healthcare professionals to promote, while accounting for any individual patient circumstances and having consulted with them and/or their caregiver.

Putting this into practice

So, what are the practical implications of this consensus statement? The authors feel that there are three practical implementable actions that all hospital staff can begin using immediately.

1. Be a champion to promote physical activity and exercise for patients
2. Ask patients about their fitness and activity levels
3. Use the measurement of physical fitness and activity as a ‘vital’ sign.

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The first action point is for senior clinicians (such as consultants and registrars) to initiate conversation about physical activity and exercise with their patients. The importance of initiating conversation cannot be underestimated. It supports the UK's 'Making Every Contact Count' initiative (Health Education England, 2018), and the National Institute for Health and Care Excellence (2015) advice to take advantage in each clinical instance between healthcare professionals and patients and is viewed as crucial to deliver patient-driven behavioural change. However, the authors acknowledge that while many clinicians recognise the importance of these contacts and conversations, there is a gap between the perceived importance and the regularity of conversations on physical activity (Lobelo et al, 2009). This is where the wider multidisciplinary healthcare team take over the conversation to implement an action plan, with many nurses, physiotherapists, clinical physiologists, exercise therapists and support workers better placed to deliver this task.

The second action point is to enquire about the physical fitness levels of the patient. Cardiorespiratory fitness is significantly associated with morbidity and mortality in people with cystic fibrosis (Hebestreit et al, 2019). In people with cystic fibrosis, high levels of cardiorespiratory fitness add years to survival and it is recommended that these are assessed regularly. A cardiopulmonary exercise test is the gold-standard test, being valid and reliable, to assess maximal function of the heart, lungs and muscle of a patient (Saynor et al, 2013), and while its implementation is established in hospitals throughout the UK, it is not yet used enough (Stevens et al, 2010). Moreover, if cardiopulmonary exercise testing is unavailable, field tests can be used to assess function in this clinical group, meaning that no patient is denied the opportunity of enhanced physiological assessment.

The final action point is for senior staff to actively embed the assessment of physical activity into clinical practice, use it as a 'vital' sign and encourage patients to become more active. Most patients, even those with severe chronic medical conditions, will benefit from some form of physical activity. In people with cystic fibrosis, increasing physical activity has important psychological (confidence, self-esteem, positive feelings of mood) and social (friendship, decreased loneliness) effects, in addition to health benefits (facilitate airway clearance and could slow the decline in lung function). This approach to promoting activity links well to global health initiatives such as Exercise is Medicine and Moving Medicine, but requires training of the medical workforce (Asif et al, 2022); a strategic development of NHS staff that the Exeter Activity Unlimited consensus recommends (Williams et al, 2022).

Conclusions

The approach to physical activity promotion and planning for patients must start with regular conversations with the medical and allied healthcare team, to support behavioural change and move beyond the classical medical model of dealing with symptoms, diagnoses and treatment. This consensus statement provides a holistic evidence base for how we can rethink the use of physical activity, a cost-effective management strategy for people with cystic fibrosis. The authors would welcome an explicit management strategy of physical activity as part of the NHS, and other worldwide healthcare pathways, not just in cystic fibrosis, but other chronic medical disease conditions.

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Key points

- Engaging in physical activity is a well-known and established strategy for the prevention of non-communicable diseases, but engagement in physical activity for patients with complex medical conditions has been given less attention.
- Physical activity for patients with complex medical conditions should be actively promoted as it is known to benefit physical, psychological, social, and economic factors related to health and wellbeing.
- Clinicians have an important role in promoting activity by engaging in conversations with patients about the benefits of physical activity.
- In advising about physical activity for patients, physical health benefits should not be the only factor promoted – other important psychological and social benefits should also be emphasised.
- Cardiorespiratory fitness is a global marker of health, and it should be routinely assessed.

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