

Cystic Fibrosis Research News

Title:

Active parents, Active youth? Exploring the association between physical activity levels of youth with Cystic Fibrosis and their parents

Lay Title:

The relation between the physical activity behaviour of youth with Cystic Fibrosis and their parents

Authors:

Manon Kinaupenne^a, Stephanie Van Biervliet^b, Kim Van Hoorenbeeck^c, Heidi Schaballie^b, Kristof Vandekerckhove^d, Marieke De Craemer^{a,§}, Heleen Demeyer^{a,e,§}

Affiliations:

^a Department of Rehabilitation Sciences, Ghent University, Corneel Heymanslaan 10, Ghent, Belgium

^b Department of Pediatrics, Centre for Cystic Fibrosis, Ghent University Hospital, Ghent, Belgium

^c Department of Pediatrics, Antwerp University Hospital, Edegem, Belgium

^d Department of Pediatric Cardiology, Ghent University Hospital, Ghent, Belgium

^e Department of Rehabilitation Sciences, KU Leuven, Leuven, Belgium

[§] Shared last authors

What was your research question?

Is there a relation between the physical activity behaviour of youth with Cystic Fibrosis and the physical activity behaviour of their parents?

Why is this important?

Physical activity (PA) has important health benefits for people with Cystic Fibrosis (CF). For example, being more active is related to fewer hospitalisations. Despite these benefits, youth with CF are less active compared to healthy peers, thus these health benefits might be missed. Someone's physical activity behaviour is influenced by several factors. Parents are considered one of these influences because they play a major role in shaping the PA behaviour of their children. In healthy youth, we know from research that more active parents also have more active children. Whether this is also the case in youth with CF is not known. If there is a link, this might provide opportunities to increase their physical activity behaviour.

What did you do?

Cystic Fibrosis Research News

We tested 26 youth between 6 and 17 years old with a confirmed CF diagnosis together with their parents. Parents and youth were asked to wear an activity monitor (a small device worn around the waist using a band) for one week when they were awake. After the data analysis, we received information about the total time that a person is active per day and the time per day that a person is doing intense activities, both expressed in minutes per day.

What did you find?

Our analyses show that higher activity levels in parents were related with higher activity levels in their youth for both intense activities and their total amount of activity. Youth with less active parents were less active as compared to youth with more active patients.

What does this mean and reasons for caution?

Motivating people to be more active is complex. The present study may imply that stimulating parents to be more active could indirectly also influence the behaviour of youth with CF. This approach might help to achieve the health benefits that come from regular physical activity. We need to be cautious about the causality of the findings in this study, because we can not tell for sure if parents influence the PA behaviour of their children, the other way around (thus that children would influence the behaviour of their parents) or maybe both.

What's next?

Our findings should be confirmed in a larger group of youth with CF and their parents. It would also be interesting to test whether an intervention that changes the activity of parents would indeed result in a change in activity of their youth. Probably this strategy needs to be one of different parts of larger intervention.

Original manuscript citation in PubMed

<https://pubmed.ncbi.nlm.nih.gov/39613539/>