

Cystic Fibrosis Research News

Title:

Physical Activity Assessment in Cystic Fibrosis: A Position Statement

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What was your research question?

What are the best tools to measure a physical activity in research studies and in clinical practice?

Why is this important?

Physical activity is helpful in slowing the progress of cystic fibrosis and also improves general health and wellbeing. Currently, a variety of different tools are used to measure physical activity. It would be helpful to know which tools allow the most precise measurement of physical activity.

Information on how precise physical activity tools are will help researchers to be sure that their study results are right. It will also help researchers compare the results of different studies. Information on how precise physical activity tools are will give clinicians useful information about their patients physical activity levels. It will highlight if people with CF need advice on physical activity levels.

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What did you do?

Physical activity can be measured using physical activity monitors, questionnaires or diaries. We looked at published research papers that used these tools. We looked at information on how easy these tools were to use and how precise they were.

Experts on physical activity used the information to answer some important questions

1. Which motion sensors/questionnaires/diaries should be used to measure physical activity in clinical practice and in research studies?
2. What results from the motion sensors, questionnaires and diaries should be recorded?
3. What is an important difference in physical activity?

What did you find?

Currently, activity monitors such as the SenseWear® or ActiGraph are the best tools available to measure physical activity. These monitors record the amount of energy used, and the number of steps taken during physical activity. They also measure the time spent in different intensities of physical activity and the time spent sitting or lying.

Pedometers are cheaper and easier to use than activity monitors and basically record the number of steps you take. The pedometer with the most available information is the DigiWalker™ pedometer.

Currently, a questionnaire called 'Habitual Activity Estimation Scale' has the most available information. Questionnaires are not as precise as monitors at assessing physical activity. They are useful to help start discussions with patients on physical activity levels.

Diaries are also useful to help start discussions with patients on physical activity levels; however, we could not find the enough information to decide on the best diary.

Physical activity can change by small amounts day-to-day and week-to-week. There is not enough information available to know what difference in physical activity is really important.

What does this mean and reasons for caution?

This statement will help researchers and clinicians to use the best tools available to measure physical activity. This statement will need to be updated as new tools and new information becomes available.

What's next?

Future research should focus on getting more information on these physical activity tools. Future research should also focus on getting information on how easy and how precise new physical activity tools are.



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