

Cystic Fibrosis Research News

Title:

The psychometric properties of the Leicester Cough Questionnaire and Respiratory Symptoms in CF tool in cystic fibrosis.

Authors:

Nathan Ward^{ab}, Kathy Stiller^c, Hilary Rowe^a, Anne E Holland^{bd}

Affiliations:

^aRoyal Adelaide Hospital, North Terrace, Adelaide, Australia 5000

^bLa Trobe University, Melbourne, Australia, 3004

^cCentral Adelaide Local Health Network, Adelaide, Australia 5000

^dAlfred Health, Commercial Road, Melbourne, Australia, 3004

What was your research question?

We evaluated the validity, reliability and responsiveness of two questionnaires that can be used for adults with cystic fibrosis (CF): the Leicester Cough Questionnaire (LCQ) and a short respiratory symptom screening questionnaire that we have developed called the Respiratory Symptoms in Cystic Fibrosis (ReS-CF) tool. They were compared against the Cystic Fibrosis Questionnaire (Revised) (CFQR), a quality of life questionnaire widely used in CF.

Why is this important?

People with CF often complain of cough, even those with good lung function as well as those with more severe lung disease. The ability to accurately measure the impact of cough on the quality of life, including the physical, psychological and social effects, in people with CF may be useful in the clinical and research setting.

What did you do?

Our study had two parts. In the first part, participants completed the LCQ, ReS-CF and the CFQ-R when well and then completed them again one week later. In the second part, participants completed the same three questionnaires when starting additional treatment for an acute chest infection and then again four weeks after starting treatment. They also completed a scale asking them to rate how much better or worse they felt at the four week point compared to when they started treatment.

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What did you find?

Scores on the LCQ had a good relationship with those for the respiratory section of the CFQ-R. The LCQ results over the one week follow-up period were consistent. The LCQ also showed a good ability to detect a change in symptoms in those undergoing additional treatment for an acute chest infection. The ReS-CF had a moderate relationship to the CFQ-R respiratory domain and was also able to detect a change in those who felt better after receiving additional treatment for a chest infection.

What does this mean and reasons for caution?

This study is the first to investigate the properties of the LCQ and ReS-CF in adults with CF. Whilst the findings of this study suggest that both the LCQ and ReS-CF may be useful, further evaluation is required given that our study was only conducted in one CF centre and that the majority of adults in the first part of the study had good lung function.

What's next?

Further studies investigating the usefulness of these tools in larger, multi-centred studies and as outcome measures in research trials is required.

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