Title:
Breathlessness catastrophizing relates to poorer quality of life in adults with cystic fibrosis

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What was your research question?
Breathlessness catastrophizing is a negative thinking style related to feeling breathless. Breathlessness catastrophizing includes rumination (repetitively going over a problem in your mind), magnification (thinking the problem is bigger than it is), and feelings of hopelessness about being breathless. The aim of this study was to investigate if catastrophizing about breathlessness is associated with health-related quality of life in adults living with cystic fibrosis (CF).

Why is this important?
Advances in CF treatment have resulted in increased life expectancy, and a subsequent need to better understand psychosocial issues related to quality of life in adults living with CF. Research suggests that anxiety and depression are related to poorer health-related quality of life in people with CF, but less is known about breathlessness catastrophizing. Breathlessness is common among people with CF. Increasing our understanding of breathlessness catastrophizing may help lead to improved health-related quality of life for CF patients.

What did you do?
We asked adult patients attending a regularly scheduled CF clinic appointment between May 2011 and June 2013 to complete several questionnaires measuring symptoms of anxiety, depression, pain, breathlessness catastrophizing, and health-related quality of life. Lung function was also measured. Forty-five adults with CF completed the questionnaires. We
examined if individuals who catastrophized more about feeling breathless were more or less likely to report poorer health-related quality of life.

**What did you find?**
Individuals who reported more symptoms of depression, pain, and breathlessness catastrophizing tended to report lower levels of health-related quality of life. This was true regardless of lung function, meaning that individuals with mild, moderate, and severe CF engaged in breathlessness catastrophizing, which contributed to poorer health-related quality of life. Anxiety symptoms were not related to health-related quality of life.

**What does this mean and reasons for caution?**
Individuals who engage in breathlessness catastrophizing tend to report lower levels of health-related quality of life. Results from this study have potential implications for CF care and rehabilitation. The International Committee on Mental Health in CF recommends screening and treating depression and anxiety. Breathlessness catastrophizing may be another psychological construct to consider when assessing mental well-being and quality of life. Although this small study was not designed to determine if breathlessness catastrophizing directly causes poorer quality of life, it does introduce breathlessness catastrophizing as a potential treatment target warranting further exploration.

**What’s next?**
Future studies could examine breathlessness catastrophizing in larger and more diverse samples and explore how such negative thinking styles could be modified through psychological interventions in order to help optimise CF quality of life.

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