

Cystic Fibrosis Research News

Title:

Mental health and adherence in CF: Self-efficacy and perceived barriers as mediators

Lay Title:

Mental health is related to adherence through self-efficacy and perceived barriers

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What was your research question?

This study examined factors, such as self-efficacy related to taking medications and perceived barriers, that might explain the association between mental health (e.g., anxiety and depressive symptoms) and medication adherence.

Why is this important?

People with CF often experience higher rates of anxiety and depressive symptoms than those without CF. Mental health symptoms can lead to negative beliefs about the importance of medication, lower self-efficacy to take medications, and reduced medication adherence. Mental health symptoms can also make it so that people are more likely to perceive barriers to care as difficult to overcome, which can also make it harder to take medications as prescribed. Our findings may help to outline personalized interventions that focus on self-efficacy and barriers to care, and ultimately improve adherence.

What did you do?

Participants were part of a larger study, the Daily Care Check-In Validation Study. As a part of that study, people with CF, who were 13 years of age and older, completed measures of self-efficacy related to taking medications, perceived barriers, and measures of depressive and



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anxiety symptoms. Participants completed a demographic questionnaire and the measure of perceived barriers during their clinic visit, and were asked to give authorization to collect pharmacy refill records. Adherence was calculated from pharmacy refill records. Participants were emailed a link to complete the other measures online.

What did you find?

We found that when people experienced mental health symptoms (either anxiety or depression), they were likely to report more interference from barriers to disease management or experience less medication self-efficacy, which was related to worse adherence.

What does this mean and reasons for caution?

Our findings suggest that building self-efficacy around taking medications may reduce the impact that mental health symptoms have on adherence. Care teams should also work with people with CF to address barriers to taking daily therapies that they may be experiencing. Our findings also highlight that importance of continuing to screen for mental health symptoms among people with CF, which many care teams are already doing. Our findings are specific to the people who participated in this study, and findings among people experiencing more mental health symptoms or barriers to care may be different.

What's next?

Next steps include examining whether our findings are true for people with CF who are taking ETI, as our study occurred before the introduction of ETI.

Original manuscript citation in PubMed

<https://pubmed.ncbi.nlm.nih.gov/39986976/>