Cystic Fibrosis Research News

Title:
Development and Validation of CF-Medication Beliefs Questionnaire: A mixed-methods approach

Authors:
Michelle N. Eakin¹, Shang-En Chung¹, Jessica Hoehn², Belinda Borrelli³, Devin Rand-Giovannetti⁴, and Kristin A. Riekert¹.

Affiliations:
¹ Division of Pulmonary and Critical Care Medicine, Johns Hopkins University, Baltimore, MD
² Department of Psychology, University of Maryland, Baltimore County, Baltimore MD
³ Boston University, Henry M Goldman School of Dental Medicine, Boston, MA
⁴ Department of Psychology, University of Hawai’i at Mānoa, Honolulu, HI

What was your research question?
Can we create and evaluate a new patient survey on medication beliefs amongst people with cystic fibrosis (CF)?

Why is this important?
Adhering to medication schedules is important for ensuring good health outcomes. The way people think about their medicines impacts how often they use it. We wanted to create a survey of motivation, perceived importance, confidence, and the pros/cons of taking medicines, to see which were associated with their adherence.

What did you do?
We created the Cystic Fibrosis-Medication Belief Questionnaire (CF-MBQ) based on our previous research. We asked 128 adolescents and adults with CF to complete the survey as part of a larger research project. We compared their responses on the CF-MBQ to their pharmacy refill records to see if the medication beliefs were associated with medication adherence.

What did you find?
We found that patient's reported motivation, perceived importance of the medicine, confidence to take the medicine and reasons to take/miss the medication was associated
with their adherence. The CF-MBQ survey was found to be reliable and valid for measuring patient medication beliefs.

**What does this mean and reasons for caution?**
Given the importance of medication adherence on long term health in CF it is important to develop effective interventions to support adherence. Understanding the way people think about their medicines could be very useful in helping them manage their medicines. The CF-MBQ is valid and reliable for this purpose.

**What’s next?**
We need to use what we learn about people’s beliefs on medication to develop new patient centered interventions, that support people with CF in taking their medicines as prescribed.

**Original manuscript citation in PubMed**