



Cystic Fibrosis Research News

Title:

Antimicrobial resistance: concerns of healthcare providers and people with CF

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What was your research question?

We wanted to evaluate understanding and opinions of health care providers and people with CF across the world toward antibiotic i.e. antimicrobial resistance.

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Why is this important?

People with CF often have chronic bacterial lung infections that require treatment with antibiotics. Repeated, prolonged and/or chronic treatments with antibiotics can increase the risk of resistance to these antibiotics. Resistance is defined as “the inability of antibiotics to effectively inhibit the growth of or kill a given microorganism” and contributes to how well antibiotics work. Knowing how providers and patients think about this topic will help us to provide appropriate education for the CF community.

What did you do?

We surveyed CF healthcare providers and people with CF (or their families) across the world using an online survey that was distributed by national CF organisations. This survey covered the following content topics: 1) knowledge of antibiotic resistance 2) consequences of antibiotic resistance 3) concerns about antibiotic resistance 4) type of information they would like to know about antibiotic resistance 5) where they would like to get that information from. We also asked healthcare providers about hospital antibiotic management programs.

What did you find?

Surveys were completed by 443 healthcare providers and 464 patients from 30 countries. More than half of respondents in each group said they were “very concerned” about antibiotic resistance. They shared concerns about risk factors (frequent antibiotics use; either intravenous or by mouth) and the most concerning bacteria to develop resistance (*Pseudomonas* and *Burkholderia*). They also rated consequences of antibiotic resistance such as affecting choice of antibiotics and life expectancy. We found that many healthcare providers felt they educated CF patients and families on antibiotic resistance, but only half of patients and families remember their healthcare team having this conversation.

What does this mean and reasons for caution?

Healthcare providers and patients with CF agree on the importance, risk factors for and consequences of antibiotic resistance in CF. This high level of agreement in understanding and concern will help future education. The difference in healthcare providers stating they discuss resistance with their patients and the patients not recalling those conversations highlights that providers may need to provide information more consistently, frequently or use alternate approaches.

Although there were a large number of survey respondents, it is important to caution that those who responded may know more about resistance than others within the community.

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What's next?

Next we will take this information to develop educational materials for the CF community (healthcare providers and CF patients/families) about antibiotic resistance including publications in outlets as such CF Research News.

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