

Comparing Higher and Lower Intensity Parent-Clinician Communication Trainings to Reduce Antibiotic Misuse in Children

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What was the research about?

Each year, millions of children take antibiotics to treat ear, nose, throat, and chest infections. Antibiotics don't work to treat infections caused by viruses, such as the common cold or flu. Educating parents and clinicians, such as doctors and nurses, about antibiotic use may help reduce unneeded prescriptions.

In this study, the research team compared two ways of helping clinicians and parents discuss whether to use antibiotics:

- **Less intense training.** Clinicians received a 20-minute training on antibiotic use. Parents viewed a 90-second video about safe antibiotic use before their clinic visit.
- **More intense training.** Clinicians and parents had the same training on antibiotics as those in the less intense group. Clinicians also received a 50-minute training on how to talk with parents about antibiotics. Parents received a brochure to take home. Clinicians also received parents' rating about their desire for an antibiotic before their visit.

What were the results?

The rate of unneeded antibiotic prescriptions didn't differ between the less and more intense training. The trainings also didn't differ in parent reports of

- Quality of communication between parents and clinicians

- Shared decision making, or the process in which patients and doctors work together to make healthcare decisions
- Satisfaction with care
- Needing to go back to the clinic
- Side effects

Who was in the study?

The study included 1,600 parents whose children had symptoms of ear, nose, throat, or chest infections. All received care at one of two clinics in the Kansas City area. Children were ages 1–5. Among parents in the less intense training, 80 percent were white, 12 percent were Black, and 8 percent were another race, more than one race, or did not answer. Among parents in the more intense training, 77 percent were white, 13 percent were black, and 10 percent were another race, more than one race, or did not answer. Among all parents in the study, 19 percent were Hispanic, and 84 percent were women.

A total of 41 clinicians took part in the study. They had an average of eight years in practice, and 78 percent were women.

What did the research team do?

The research team assigned clinicians and their patients by chance to the less or more intense training. Then the team looked at children's health records after their visit. Based on symptoms and

diagnoses, the team decided whether antibiotics prescribed during the visit were needed.

Parents completed surveys before and after the visit, and again two weeks later.

Parents, clinicians, and members of a community advisory board helped design, plan, and conduct the study.

What were the limits of the study?

The study didn't look at how the trainings compared with no training. The number of patient visits that

happened after training differed across clinicians, which could have affected the findings.

Future research could continue to look at ways to reduce the rate of unneeded antibiotic prescribing.

How can people use the results?

Clinics can use the results as they consider ways to reduce unneeded antibiotic prescriptions.

To learn more about this project, visit www.pcori.org/Goggin327.