



Medication Best Practices: Patient Communication Strategies to Support Appropriate Antibiotic Use

The winter season marks a common time for patients to seek outpatient treatment for respiratory symptoms. Helping patients to understand when antibiotics are indicated and when they are not is important to improving antibiotic-related patient safety and slowing the spread of antibiotic resistance.

In a recent article published in *BMC Med United Kingdom*¹, researchers found that combining fear-based messages about antibiotic resistance with empowering messages about self-management of symptoms without antibiotics could be effective at reducing inappropriate antibiotic use. Participants, previewed with a description of a flu-like illness, were randomly selected to receive a fear-based message (1000 participants), mild fear plus empowerment-based message (1500 participants), or strong fear plus empowerment-based message (1500 participants) on the typical prognosis and benign course of most acute respiratory tract infections. Those in the fear plus empowerment groups reported they would be less likely to visit a provider for their next acute respiratory track illness than those presented with the fear only message (45.1%-46.1% vs 29.2%).

In the CDC's *Core Elements of Outpatient Antibiotic Stewardship*², it is recommended that providers explain when antibiotics are not needed in combination with recommendations for self-management. An example of the two-step approach may include: "Most people get cold or flu symptoms every year and usually recover on their own. Fevers can sometimes last for days, coughs can persist for weeks, and antibiotics generally don't change symptom duration. Antibiotics should not be taken for cold and flu symptoms. Taking antibiotics when they are not needed encourages bacteria to become resistant. This means antibiotics may not work for future serious illnesses that can only be cured by antibiotics. Most cold and flu symptoms are best treated at home by taking over-the-counter pain and fever relievers and getting plenty of fluids and sleep¹."

Educating patients on the potential harms of antibiotic treatment such as nausea, abdominal pain, diarrhea, and allergic reactions have been shown to decrease desire for an antibiotic when not indicated. Providing educational signage in the waiting room to note when an antibiotic may be needed can be beneficial (https://www.cdc.gov/antibiotic-use/community/pdfs/aaw/au_improving-antibiotics-infographic_8_5x11_508.pdf, https://www.cdc.gov/antibiotic-use/community/pdfs/aaw/AU_viruses-or-bacteria-Chart_508.pdf, and <https://www.choosingwisely.org/patient-resources/#keyword=antibiotic>).

References:

1. Roope LS, Tonkin-Crine S, Herd N, et al. Reducing expectations for antibiotics in primary care: a randomised experiment to test the response to fear-based messages about antimicrobial resistance. *BMC Med* 2020;18(1):110.<https://doi.org/10.1186/s12916-020-01553-6>
2. Sanchez, G.V., Fleming-Dutra, K.E., Roberts, R.M., Hicks, L.A. Core Elements of Outpatient Antibiotic Stewardship. *MMWR Recomm Rep* 2016;65(No. RR-6):1–12.

Read more about the Core Elements of Outpatient Antibiotic Stewardship at the CDC's webpage:
<https://www.cdc.gov/antibiotic-use/core-elements/outpatient.html>