Clinicians’ Beliefs, Knowledge, Attitudes, and Planned Behaviors on Antibiotic Prescribing in Acute Respiratory Infections. 

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Haili Hruza, MPH 1; Tania Velasquez, MPH 2; Karl Madaras-Kelly, PharmD, MPH 1-4; Katherine Fleming-Dutra 5, MD; Matthew Samore, MD, FSHEA 2, Jorie Butler, PhD 2,3
Boise VA Medical Center, Boise, ID 1; George E. Wahlen VA Medical Center, Salt Lake City, UT 1, 7; University of Utah School of Medicine, Salt Lake City, UT 1, 2; Idaho State University College of Pharmacy, Meridian, ID 4; Centers for Disease Control and Prevention, Atlanta, GA 5

Background: We sought to gauge provider perceptions to prepare an intervention which featured audit-feedback reports, academic detailing, and communication training to improve antibiotic treatment of acute respiratory infections (ARIs).

Methods: One-on-one interviews with providers (n=20) from five VA Medical Centers were conducted in May-July 2017. Participants were recruited from emergency departments, primary care and community-based outreach clinics by e-mail. Interviews were conducted by telephone, audio-recorded, and transcribed. The Theory of Planned Behavior was used to develop semi-structured interview questions to capture attitudes, subjective norms (peer practices), planned future behaviors for managing ARIs, and barriers to appropriate antibiotic prescribing and use identified via consensus among providers.

Results: A total of 20 providers from five geographically distinct VA facilities were interviewed. Overall, our sample featured a majority of females (n=13), approximately half were mid-level providers (n=11), and most were associated with an academic site (n=14). Representation of ED (n=6), CBOC (n=7), and PC (n=7) settings were nearly equal across the sample. Barriers to appropriate antibiotic prescribing included the lack of time and resources to address patient demand and diagnostic uncertainty. Time was cited as a barrier for both cases, as well as, a barrier to seek provider education. Perceived norms that were believed to drive inappropriate prescribing included the actions of frequent antibiotic prescribing by peers and the lack of patient knowledge. Providers felt they had control over prescribing decisions. Opportunity is ample to improve antibiotic use based on quality improvement initiatives that utilize audit-feedback, academic detailing, and communication techniques due to the lack of current practices in clinics (see below for select quotes concerning antibiotic use and potential acceptability of intervention components).

Beliefs & Attitudes

Interview Questions Created & Reviewed by Expert Panel

I: Okay, and how much control do you have over the prescribing decisions that you make?

P: “It’s 100%.”

Resource: “We don’t even have rapid strep tests […] So I think that that makes it difficult.”

Perceived Barriers to Intervention Implementation:

“I think that we don’t have good mechanisms […] for finding an appropriate way to single people out […] if you listed all of the providers in the clinic and how many prescriptions that each person was rating, that may have some effect […] even if you get a bump and a response from somebody, then you have to have the constant follow-up […] finding a peer who is comfortable enough (laughter) to do it is going to be hard, and then having the time to do it and the diligence.”

Social Norms

Barriers to Appropriate Prescribing

Peer Practice: “[…] it think it becomes an issue if you’re caving all the time. If you become the antibiotic go to […] if you’re the one that everybody says, well so and so gave me and so so […]

Time: “It’s the education piece, that’s where the time and the effort goes in (.)”

Patient Demand: “[…] That’s the 800-pound gorilla. It’s where I’m getting strong pressure from the patient.”

Opportunity: “It’s 100%.”

Interventions should aim to provide tools to providers to overcome barriers such as patient demand, resource limitations, and be considerate of time. In general, audit-feedback reports and education for both the provider and patient are viable solutions to improve prescribing practice. In addition, providers felt they were able to prescribe autonomously when resources were available to allow for adequate diagnostic of ARIs.

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References: None

Address for Correspondence: Jorie Butler, PhD Salt Lake City, UT jorie.butler@psych.utah.edu

Abstract (Amended)

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Objective

Provider perceptions and acceptability of intervention components may play a pivotal role in adoption of processes that lead to long-term and sustained behavior change. We aimed to gauge provider mental models concerning appropriate antibiotic use and identify the acceptability of proposed intervention activities to improve antibiotic use within outpatient settings.

Methods

Background: We sought to gauge provider perceptions to prepare an intervention which featured audit-feedback reports, academic detailing, and communication training to improve antibiotic treatment of acute respiratory infections (ARIs).

Methods: One-on-one interviews with providers (n=20) from five VA Medical Centers were conducted in May-July 2017. Participants were recruited from emergency departments, primary care and community-based outreach clinics by e-mail. Interviews were conducted by telephone, audio-recorded, and transcribed. The Theory of Planned Behavior was used to develop semi-structured interview questions to capture attitudes, subjective norms (peer practices), planned future behaviors for managing ARIs, and barriers to appropriate antibiotic prescribing and use identified via consensus among providers. Codes were categorized into themes to map mental models.

Results: A total of 20 providers from five geographically distinct VA facilities were interviewed. Overall, our sample featured a majority of females (n=13), approximately half were mid-level providers (n=11), and most were associated with an academic site (n=14). Representation of ED (n=6), CBOC (n=7), and PC (n=7) settings were nearly equal across the sample. Barriers to appropriate antibiotic prescribing included the lack of time and resources to address patient demand and diagnostic uncertainty. Time was cited as a barrier for both cases, as well as, a barrier to seek provider education. Perceived norms that were believed to drive inappropriate prescribing included the actions of frequent antibiotic prescribing by peers and the lack of patient knowledge. Providers felt they had control over prescribing decisions. Opportunity is ample to improve antibiotic use based on quality improvement initiatives that utilize audit-feedback, academic detailing, and communication techniques due to the lack of current practices in clinics (see below for select quotes concerning antibiotic use and potential acceptability of intervention components).

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