

## Research Week 2020

## Patient Satisfaction Not Impacted by Antibiotic Prescribing for Viral Upper Respiratory Infections

Michael Ray, M.P.H., Gregory Tallman, Caitlin McCracken, Miriam Elman, Jessina McGregor

OHSU-PSU School of Public Health

## Keywords

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## Abstract

Treating viral upper respiratory infections (URI) with antibiotics contributes to the rise of antimicrobial resistance. Major drivers of unnecessary prescribing are a patient's expectation to receive antibiotics for acute illness and the physician's desire to provide satisfactory care. Our objective was to determine if receiving an antibiotic prescription for URI is associated with increased patient satisfaction.

We identified emergency department (ED) and ambulatory care (AC) visits with an acute URI diagnosis code (9/2015-5/2016) that had an associated patient-satisfaction survey. The survey queried patients' overall satisfaction using a Likert-type scale ranging from 1-Very Poor to 5-Very Good. We assessed survey responses for visit satisfaction among patients receiving and not receiving antibiotics using the Wilcoxon rank-sum test, comparing ED and AC visits separately.

We collected survey responses from 282 ED patients and 1306 AC patients with acute URI. Compared to non-recipients, ED respondents receiving an antibiotic were more likely to be female (67% vs 55%) and on Medicare (28% vs 21%); AC respondents receiving a prescription were more likely to be female (68% vs 61%) and have private insurance (63 % vs 53%). Median responses did not differ by antibiotic prescription status in either group (rank-sum p-value=0.4 and 0.8 for ED and AC respectively). When dichotomizing the satisfaction score, more patients receiving antibiotics reported satisfaction of good to very good than those not receiving antibiotics (84% vs. 76%; p=0.1) among ED patients, but not AC patients (95% vs. 94%; p=0.5).

Patient satisfaction was not strongly associated with antibiotic receipt among ED and AC patients with URI in our study. This finding suggests that providers may limit the spread of antibiotic resistance by ceasing to unnecessarily prescribe antibiotics without jeopardizing patient satisfaction. Given low response rates to visit satisfaction surveys, further work is needed to validate this study and evaluate its generalizability.