

Antibiotic Prescribing for Adults with Upper Respiratory Tract Infections in an Urban Family Care Center Serving Predominantly African American Community in Western New York.

Abstract

Context: Inappropriate antibiotic prescribing by nurse practitioners (NPs) and other providers for upper respiratory infections (URIs) and bronchitis enhances antibiotic resistance.

Objective: The purpose of this study was to determine how antibiotic prescribing rates for URIs are associated with patient characteristics and provider type.

Design: A retrospective chart review was performed on all adult (≥ 18 years old) patient visits to the family care center (FCC) in 2005. Those meeting the inclusion criteria with a diagnosis of nasopharyngitis (cold), nonspecific URIs, acute pharyngitis, acute sinusitis and acute bronchitis were reviewed. Data on the use of antibiotics to treat these conditions were extracted from FCC and the National Ambulatory Medical Care Survey (NAMCS) datasets.

Setting and Patients: Urban family care center serving a predominantly African American population.

Main Outcome Measures: Antibiotic Prescribing Rates

Results: At FCC, patients aged 18 to 44 and those seen by NPs were more likely to receive antibiotics, 84.5%, $p=.015$ and 89.5%, $p=.000$. There were too few patients seen by NPs in NAMCS dataset to be relevant. Acute sinusitis had the highest antibiotic prescribing rates in both samples, (93.1%, $p=.000$) for FCC and 72.7%, $p=.064$ for NAMCS.

Conclusion: NPs were more likely to prescribe antibiotics for viral URIs and acute bronchitis at FCC than physicians. Further studies are necessary. NPs should use the CDC campaign "Get Smart: Know When Antibiotic Works" to educate themselves and their patients about antibiotic resistance.

Keywords: antibiotic prescribing, antibiotic resistance, nurse practitioners, upper respiratory infections, NAMCS

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Year project completed: 2009

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