Reducing Antibiotic Overuse in Urgent Care Centers for the Treatment of Acute Respiratory Infections

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BACKGROUND & PURPOSE

- Antibiotic overuse is a known contributor to antimicrobial resistance (AMR).
- Antibiotics are commonly prescribed in urgent care centers (UCCs) for viral acute respiratory infections (ARIs).
- Assess the effectiveness of a multifaceted antibiotic stewardship program (ASP).

AIMS

AIM 1: Decrease the rate of inappropriate ABX use for the treatment of ARIs by 10% within 3 months of the ASP

AIM 2: Determine the impact of an ASP on AMR knowledge & attitudes among urgent care providers

AIM 3: Explore the barriers to ARI guideline adherence and the impact of COVID-19 on antibiotic prescribing rates

METHODS

- Design: Quality improvement (QI) project using a Quasi-experimental study
- Setting: 7 urban urgent care centers in Denver Colorado
- Sample: Providers’ (MDs, NPs, PAs); Adult patients seeking care for ARIs
- Intervention: ASP education, 1-hour PPT presentation, ASP tools; exam room modifications

Data Collection Time Points:

- ARI prescription rates:
  - Time 1 (T1): Pre-intervention (Non COVID)
  - Time 2 (T2): Pre-intervention (+ COVID)
  - Time 3 (T3): Post-Intervention

- Outcome Measures: Antibiotic non-responsive prescription rates for ARIs; Impact of ASP on UCC providers knowledge, attitudes and barriers to prescribing (adapted MITIGATE survey at T2 and T3).

Data Analysis:

- Descriptive statistics, proportional prescription rates, chi-square tests (alpha <0.05), thematic content analysis on knowledge & attitudes, impact of COVID-19 on prescribing behavior, and ASP preferences.

RESULTS

- Provider: 18; MD (22%), NP (28%), PA (50%)
- UCC experience, Ave. 4.92 yrs. (SD 4.61)
- Patient: 725 ARIs (T1 = 191; T2 = 224; T3 = 310)

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ASPs are feasible and highly effective in decreasing (61.4% in this study) inappropriate antibiotic prescriptions in urgent care for the treatment of ARIs.