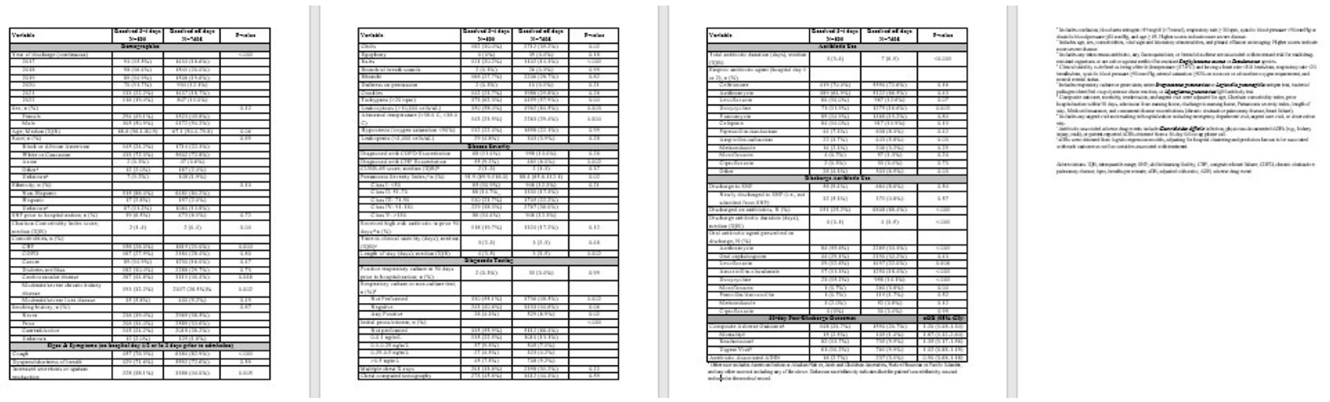

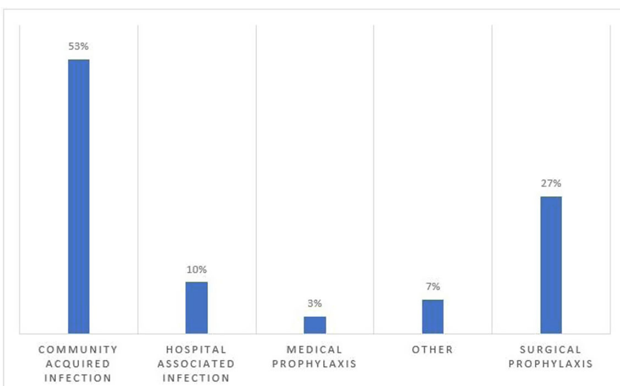

Figure 1: Indications for an antibiotic prescription at Connaught hospital in Freetown during the point prevalence survey, 2021.

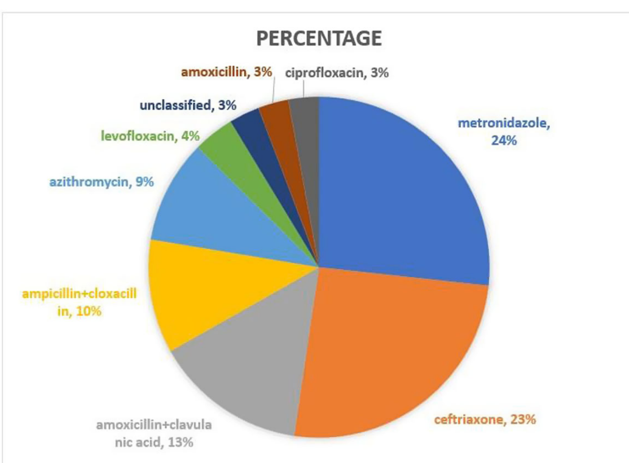

Figure 2: Percentages of antibiotics prescribed to patients admitted at Connaught hospital in Freetown, Sierra Leone during the point prevalence survey, 2021.

before 8:00 A.M. on that day were included in the study. Data entry, cleaning, and analysis were conducted using the WHO PPS platform. Ethical approval was obtained. **Results:** In total, 87 patient records were included in the survey. Most (71%) were women, and the average age was 30.6 years. The prevalence of antibiotic use was 66%, and the average number of antibiotics prescribed to patients since admission was 2. The 5 most prescribed antibiotics were metronidazole, ceftriaxone, amoxicillin and clavulanic acid, ampicillin and cloxacillin, and azithromycin. The parenteral route of drug administration was the mainstay. The most frequent indications for antibiotic prescription were community-acquired infection and surgical prophylaxis. Blood-culture requests were not ordered before the initiation of antibiotic treatment. **Conclusions:** This study was the first study to be conducted in Connaught hospital using the WHO PPS methodology. The survey reports a high prevalence (60%) of antibiotic use, and most treatment was done empirically. This finding is contrary to the WHO recommendation of <30% antibiotic use. This high prevalence of antibiotic use has the potential to increase the burden of AMR in the country. Therefore, there is an urgent need to strengthen Connaught hospital's antibiotic stewardship program.

Disclosures: None

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Sex differences in knowledge and practices regarding antibiotics and antibiotic resistance in the Puerto Rican population

Yiana Toro-Garay; Tanialy Rivera-Santiago and Vilmarie Ortiz-Bonilla

Background: Antibiotic resistance is one of the biggest threats to global health, and by 2050 it is expected to cause 10 million deaths per year globally. Sex differences depend on context and sociodemographic factors; therefore, studies addressing sex differences have been inconclusive. Furthermore, to our knowledge, sex differences in the Puerto Rican population have not been analyzed. We sought to understand whether knowledge and practices regarding antibiotic use and antibiotic resistance in the Puerto Rican population differ by sex. **Methods:** A convenience sampling was performed at outpatient clinics across Puerto Rico. Those who agreed to participate completed a self-report questionnaire aimed to address demographics, antibiotic knowledge, and experiences. Bivariate analyses were performed using Stata version 17.0 software. **Results:** In total, 252 participants received the questionnaire, and 250 completed it. Most of the participants were female (71.2%), aged >56 years (40.0%), and had a high school diploma (40.4%). Women had 2.71 (95% CI, 1.1–6.8, *P*). **Conclusions:** Women perceived themselves to be more knowledgeable regarding antibiotic use and resistance than men. However, no difference in actual knowledge could be identified. Similarly, antibiotic-related practices did not differ by sex except for using previously saved antibiotic treatment, and men had higher odds of conducting this practice. Further studies should be conducted to understand the factors that influence these behavioral practices, and educational interventions should focus on addressing misconceptions regarding antibiotics and antibiotic resistance.

Disclosures: None

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Table 1. Comparison of pre-intervention and post-intervention outcome measures

	Pre-intervention (7/1/21 – 9/30/21) N=153	Post-intervention (7/1/22 – 9/30/22) N=164	*P*
Total duration of therapy >7 days, n (%)	44 (29%)	23 (14%)	0.0013
Mean total duration of therapy, days ± standard deviation	7.0 ± 2.3	5.9 ± 1.6	<0.001
Guideline-discordant empiric therapy, n (%)	50 (33%)	31 (19%)	0.0049
Unnecessary fluoroquinolone, n (%)	15 (10%)	0 (0%)	0
Unnecessary *P. aeruginosa* coverage, n (%)	20 (13%)	14 (9%)	0.1922
No Pseudomonas coverage when indicated, n (%)	3 (2%)	1 (0.6%)	0.356
Unnecessary MRSA coverage, n (%)	6 (4%)	8 (5%)	0.6787
No MRSA coverage when indicated, n (%)	11 (7%)	1 (0.6%)	0.0022
Unnecessary anaerobic coverage, n (%)	5 (3%)	10 (6%)	0.2357
No atypical coverage, n (%)	12 (8%)	9 (5%)	0.3995

Presentation Type:
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Subject Category: Antibiotic Stewardship

Reducing the rate of guideline-discordant therapy for inpatients with community-acquired pneumonia

Kellie Arensman Hannan; Paul Frykman; Eric Mathiowetz; Jill Sathre; Nou Cheng Yang and Kelsey Jensen

Background: Despite guidelines recommending shorter durations of therapy and empiric coverage of *Pseudomonas aeruginosa* and methicillin-resistant *Staphylococcus aureus* (MRSA) only for patients with certain risk factors, optimizing therapy for community-acquired pneumonia (CAP) remains a challenge for antimicrobial stewardship (AMS) teams. We investigated the impact of a multimodal AMS initiative on the rate of guideline-discordant empiric antibiotic selection and total duration of therapy for CAP. **Methods:** A quality improvement initiative was implemented at 9 community hospitals in 2022 to optimize CAP therapy. Education was provided to pharmacists and providers. Alerts were implemented within the electronic medical record to prompt the AMS team to review fluoroquinolones, antipseudomonal β-lactams, and anti-MRSA agents ordered for CAP. Clinical pharmacists reviewed antibiotic orders for CAP at hospital discharge and encouraged providers to prescribe a total antibiotic duration of 5–7 days. For the preintervention period (July–September 2021) and the postintervention period (July to September 2022), a random sample of 320 patients with an antibiotic order for CAP were evaluated retrospectively via chart review. Patients treated for an indication other than CAP were excluded. The primary outcome was the proportion of patients with a total duration of therapy >7 days. Secondary outcomes included average duration of therapy, rate of guideline-discordant empiric therapy, and type of guideline discordance. **Results:** In total, 317 patients were included. The proportion of patients with a total duration of therapy >7 days decreased from 29% to 14% ($P < .01$). Average duration of therapy and guideline-discordant empiric therapy also decreased significantly (Table 1). **Conclusions:** This multifaceted AMS initiative was associated with decreased guideline-discordant empiric therapy and decreased total duration of therapy for CAP.

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Determining trends of respiratory tract infections in a long-term care facility pilot surveillance project

Cullen Adre; Dipen Patel; Vicky Reed; Srilakshmi Velrajan; Christopher Evans and Christopher Wilson

Background: Respiratory tract infections (RTIs) in long-term care facilities (LTCFs) are particularly burdensome among residents, the COVID-19 pandemic highlighted the devastating consequences of RTIs in LTCFs. This situation has prompted the need for LTCFs to have a robust, active surveillance system to assist LTCFs with RTI identification. Such a system could assist with faster implementation of appropriate antimicrobial therapy and critical infection prevention and control. The TN Emerging Infections Program worked with CDC EIP to implement a pilot project to test the feasibility of performing RTI surveillance to inform future changes to NHSN. **Methods:** We recruited 6 LTCFs to collect prospective RTI surveillance for 6 consecutive months from October 2021 through March 2022. Data were collected for all residents meeting the RTI surveillance definitions: pneumonia, lower respiratory tract infection, influenza-like illness (including influenza), and COVID-19. These data were entered by facility workers into a REDCap database with a prospective RTI LTCF event form. Monthly data collection summaries were submitted using a designated denominator form. Descriptive statistics were used to analyze RTI data, and analyses were performed using SAS version 9.4 software. **Results:** In total, 6 facilities participated in the pilot project during the capture period. The total number of RTI cases across all facilities was 195. December had the most cases (n = 50). The most common first triggers were new RTI signs or symptoms (67.69%), laboratory results (17.44%), imaging findings (6.67%), and clinician-diagnosed RTI (8.21%). The most reported symptom was new or increased cough (57.44%). Chest radiographs were performed for 50.77% of patients. Positive viral laboratory test results were documented 29.74% of the time. Antibiotic treatments were given to 70.77% of residents. The most commonly prescribed antibiotics were cephalosporins (22.56%), macrolides (17.95%), fluoroquinolones (12.31%), and doxycycline (9.23%). Also, 17.4% of cases with antibiotic regimens had cephalosporins as monotherapy. Vaccine documentation was as follows: influenza 2020–2021 (40.51%), influenza 2021–2022 (64.1%), complete COVID-19 vaccine series (82.56%), PPSV-23 vaccine (33.85%), and PCV-13 (23.59%). **Conclusions:** RTI surveillance was incorporated smoothly into the daily workflow for facilities; the biggest barrier to effective implementation was staff turnover. A scheduled weekly time to collect data and fill out forms proved most effective. A high percentage of cases was treated with cephalosporins as monotherapy, which, based on the latest guidelines, may be suboptimal. Individual reports were sent back to facilities with a comparison to the aggregated data. These data will be used to evaluate antibiotic appropriateness and to guide future RTI surveillance efforts in the LTCF setting.

Disclosures: None

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Pharmacist interventions for appropriate COVID-19 antiviral therapy in long-term care facilities: A public health initiative

Jenna Preusker; Daniel Schroeder; Mounica Soma; Scott Bergman; Mark Rupp; Brandon Scott; Trevor Van Schooneveld; Andrew Watkins; Matthew Donahue and Muhammad Salman Ashraf

Background: Prescribing errors related to the COVID-19 oral antiviral agent nirmatrelvir-ritonavir have been reported and are primarily due to improper renal dosing and significant drug–drug interactions. These patient safety issues are particularly concerning in the long-term care facility (LTCF) population. The Nebraska Antimicrobial Stewardship Assessment and Promotion Program (ASAP) is a unique collaborative partnership involving the University of Nebraska Medical Center, Nebraska Medicine, and the Nebraska Department of Health and Human Services (DHHS). ASAP is funded through the Nebraska DHHS healthcare-associated infections and antimicrobial resistance (HAI/AR) program and was established in 2016, with a primary focus of promoting safe and effective antimicrobial use in Nebraska. In 2022, ASAP developed a statewide pharmacist-led service to assist LTCFs in evaluating prescriptions for COVID-19 oral therapeutics. We studied the impact of ASAP pharmacist intervention on COVID-19 oral antiviral prescriptions. **Methods:** ASAP created a centralized LTCF treatment