



The Global Point Prevalence Survey of Antimicrobial Consumption and Resistance: Quantity and Quality of Antimicrobial Prescribing for Inpatients with Pneumonia in the Philippines in 2018

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INTRODUCTION

The prevalence of antimicrobial use in the Philippines is high. Pneumonia is the most common indication for prescription of antibiotics in hospitals in the Philippines. We describe the quality and quantity of antibiotic prescribing for hospitalised pneumonia patients in the Philippines in 2018.

METHODS



A point prevalence survey was performed from September to December 2018 in 28 government and private hospitals in Luzon, Mindanao and Visayas regions. Ward- and patient-level data were collected using a standardized methodology and entered through a web-based application. We analysed all antibiotic (ATC J01; antibacterials for systemic use) prescriptions for inpatients diagnosed with pneumonia.

Figure 1: Map of the Philippines, showing distribution of hospitals by region

CONCLUSION

Global-PPS data provided valuable insights in the quantity and quality of antibiotic prescribing for hospitalised pneumonia patients. These results will be fed back to the Department of Health, medical societies and hospitals for prioritisation of targets and policies towards the improvement of the Philippine antimicrobial stewardship programme .

RESULTS

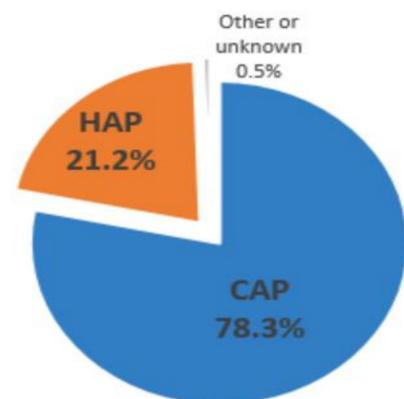


Fig 2: Proportion of patients treated for CAP and HAP

Of the 9338 admitted patients, 1516 (16.2%) received one or more antibiotic (J01) for treatment of pneumonia, the majority (78.3%) of which were being treated for community-acquired pneumonia (CAP) as shown in Figure 2: In adults, the most commonly used antibiotics were azithromycin (19.5%), ceftriaxone (19.0%) and piperacillin/enzyme inhibitor (13.2%) for CAP and meropenem (19.8%), piperacillin/enzyme inhibitor (18.9%) and levofloxacin (8.6%) for healthcare-associated pneumonia (HAP). In neonates and children cefuroxime was used most often (20.1%) for treatment of CAP, followed by ampicillin (16.7%) and amikacin (15.3%). Children and neonates with HAP were most commonly treated with amikacin (18.7%), meropenem (15.7%) and ampicillin (10.4%).

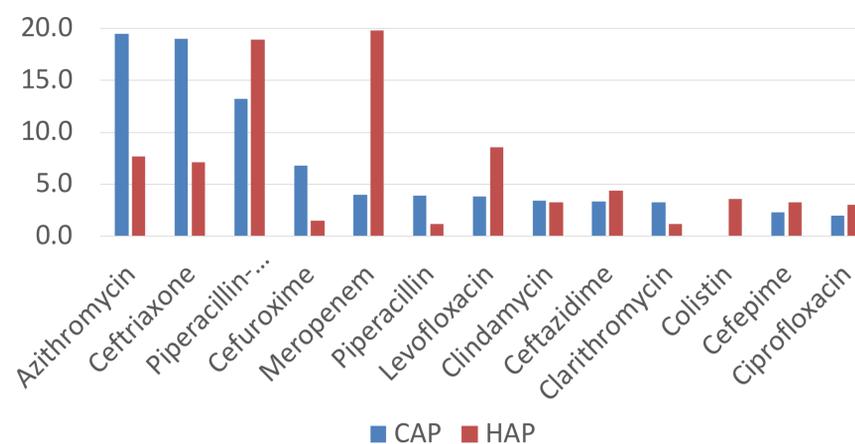


Figure 3: Top 10 most commonly used antimicrobials for CAP and HAP in adults (% of prescriptions)

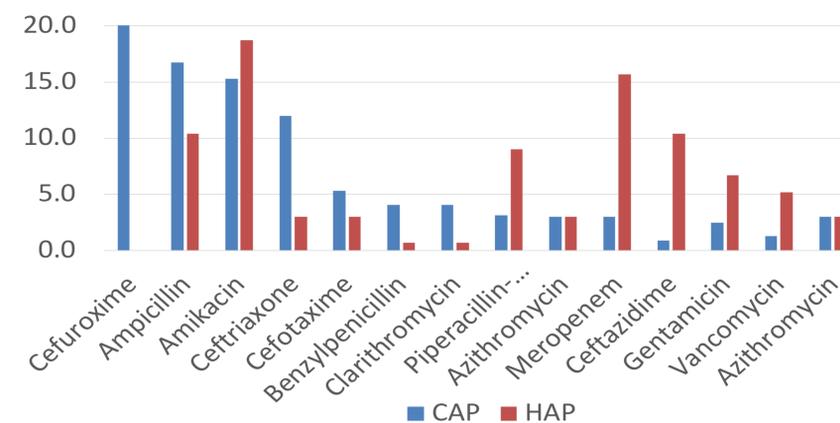


Figure 4: Top 10 most commonly used antimicrobials for CAP and HAP in children and neonates (% of prescriptions)

Overall, 16.0% of all antibiotic prescriptions for pneumonia were based on microbiological results, 11.3% for CAP and 33.9% for HAP. Microbiology-based prescriptions were most commonly targeted at ESBL-producing Enterobacteriaceae (8.4%). Further analysis of quality indicators showed that up to 80.0% of all prescriptions for pneumonia were compliant to local guidelines and reason in notes was documented for 81.0% of prescriptions. However, the stop or review date of antibiotic treatment for pneumonia was less documented (27.8%).

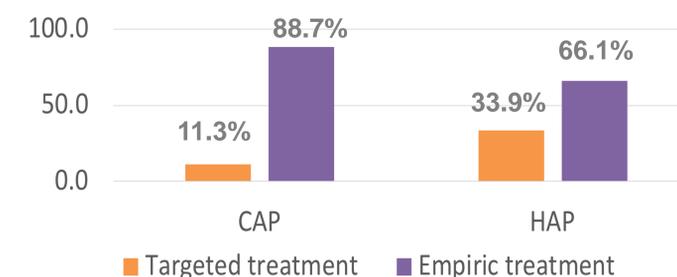


Figure 5: Targeted and empiric treatment in CAP and HAP