

E0037 The global point-prevalence survey of antimicrobial consumption and resistance (Global-PPS): antimicrobial prescribing and outcomes of lower respiratory tract infection in Egypt

Aalaa Afdal¹, Raghda Shehab El-Din¹, Salma Radwan¹, Omnia Hassan¹, Soad Abdelalim², Lydia Eshak², Ann Versporten^{*3}, Herman Goossens³

¹Ministry Of Health, Rational Drug Use, ²Ministry Of Health, ³Antwerp University

Background

Lower respiratory tract infection (LRTI) is common in Egypt and may result in death if untreated, especially in infections with multi-drug resistant organisms (MDROs). A uniform and standardized method for surveillance of antimicrobial use in hospitals was used to assess the variation in antimicrobial prescribing for LRTI in order to identify possible improvement strategies for antimicrobial prescribing habits.

Methods

The Global-PPS was conducted in May-July 2017 in 15 hospitals from different governorates. Data on patients with LRTI were analysed including details on antimicrobial agents, reasons and indications for treatment as well as a set of quality indicators. A web-based application is used for data-entry, validation and reporting as designed by the university of Antwerp, Belgium (www.global-pps.com).

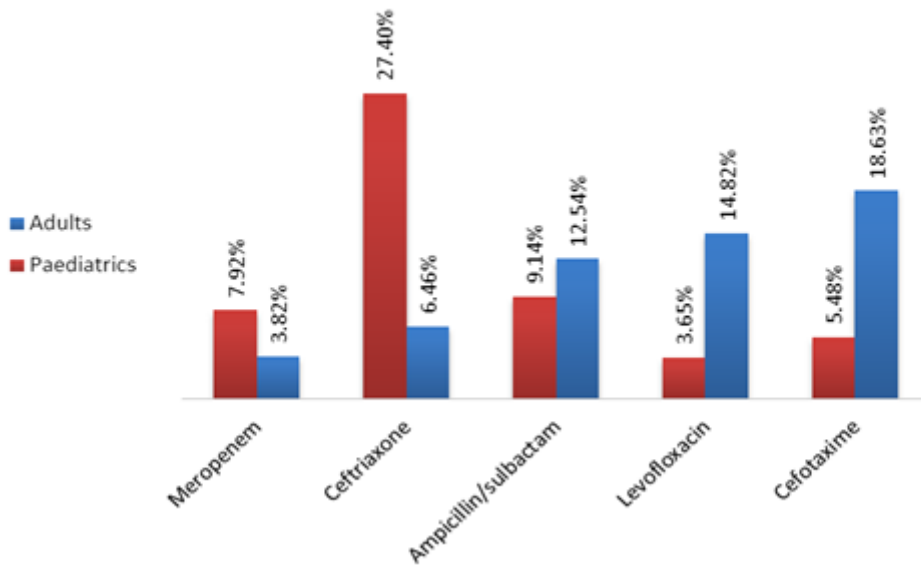
Results

The prevalence of LRTI in Egypt was 30.7% (427 out of 1388 hospitalized inpatients), Community acquired infection (CAI) represented 63.1%, while hospital acquired infection (HAI) represented 36.9 % of patients. Patients who were treated empirically represented 91 %, where beta lactams antibiotics were the most used antibiotics in both adults and paediatrics (61.5%, 63% respectively). Patients who were treated based on biomarker results were 14 % and only 9.1% received culture based treatment, where Methicillin-Resistant Staphylococcus Aureus (MRSA) was the most commonly detected organism (17.94 %). Prescribing quality indicators showed that about half the prescriptions had followed the guidelines and had documented reasons in notes, but the stop/review date was rarely documented (16.39 %).

Conclusions

The prevalence of antimicrobial use in LRTIs is high and irrational in Egypt especially with beta lactams antibiotics. The Global-PPS tool allowed us to assess different areas where antibiotics were irrationally prescribed. We identified several priorities to improve antibiotic prescribing through antimicrobial stewardship programs. The Global-PPS tool was very beneficial to set targets and we recommend to conduct the Global-PPS periodically to follow up interventions that have been taken.

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