EGYPT

Ministry of Health

The Global Point Prevalence Survey of Antimicrobial Consumption and Resistance (Global-PPS): Results of antimicrobial prescribing in Lower Respiratory Tract Infections in Egypt

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INTRODUCTION AND PURPOSE

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 practices.
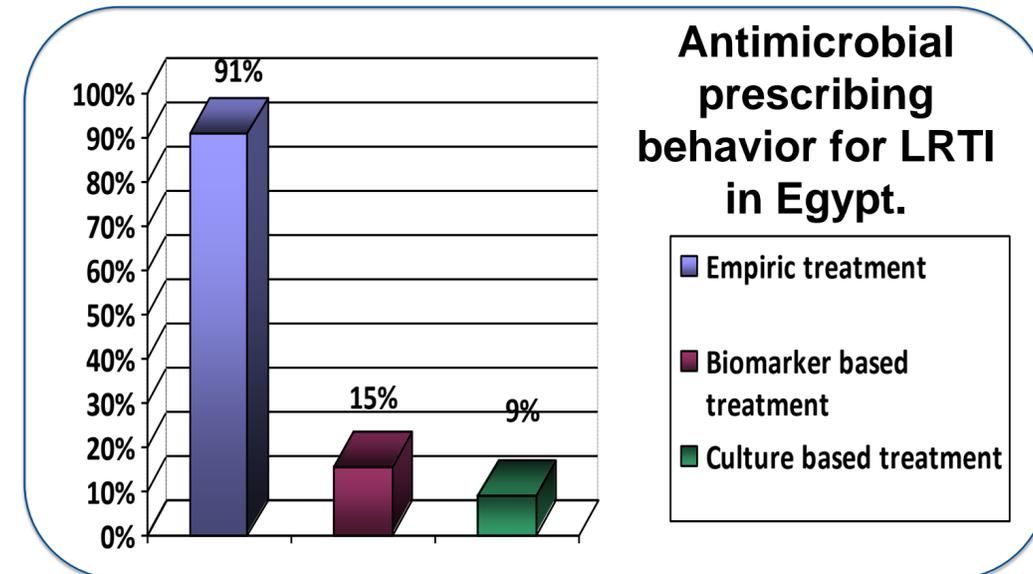
METHODS

The Global-PPS was conducted in May-July 2017 in 17 hospitals from different governorates (Cairo, Giza, Qalyoubia and Alexandria). 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 antimicrobial agents used for LRTI in Egypt was 30.7% of which community acquired infection (CAI) represented 63.1%, while hospital acquired infection (HAI) 36.9%. Prescribing quality indicators showed that about half of the prescriptions for a LRTI had followed the guidelines and had reasons in notes documented, but the stop/review date was rarely documented.

Ninety one percentage of patients were treated empirically, 14.1% of which were treated based on biomarker results. (15% of total treatment indications).
Only 9.1% of the patients received culture based treatment, where Methicillin - resistant Staphylococcus aureus (MRSA) was the most commonly detected organism (17.9 %) .

The Most Prevalent Antibiotics for LRTI In Egypt

Antimicrobial prescribing behavior for LRTI in Egypt.
- Empiric treatment — 91%
- Biomarker based treatment — 15%
- Culture based treatment — 9%

CONCLUSION

The Global-PPS tool allowed us to assess different areas where antibiotics were irrationally prescribed, like high use rate of beta-lactams and double coverage. 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, such as IV to oral shift checklist and prospective audits for guidelines compliance and stop/review date documentation.