Antibiotic Prescription: Barriers and Suggested Antibiotic Stewardship Interventions in Two Portuguese Hospitals.

Alexandra S. Simões, Daniela A. Alves, João Gregório, Sónia Dias, Pedro Póvoa, Isabel Couto, Miguel Viveiros, Luzia Gonçalves, Luís V. Lapão

1Global Health and Tropical Medicine, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, 2Unidade de Saúde Pública Internacional e Bioestatística, IHMT, UNL, 3Cedoc, Nova Medical School, UNL, 4Hospital de São Francisco Xavier, Centro Hospitalar de Lisboa Ocidental, 5Unidade de Saúde Pública Internacional e Bioestatística, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, 6Centro de Estatística e Aplicações da Universidade de Lisboa, Lisboa, Portugal

Introduction: Antimicrobial resistance is one major worldwide problem frequently associated with antibiotics overuse and incorrect prescription. In Portugal, antibiotic consumption is still higher than European average, (45.6% vs 35.8% of hospitalized patients received antibiotics). Since physicians play an important role on antibiotic use, understand their antibiotic prescribing habits is fundamental.

Objectives: To identify barriers in antibiotic prescription process, in two Portuguese hospitals, in order to design and implement effective antibiotic stewardship interventions.

Methods: The study was conducted under the scope of HAITool project - A Toolkit to Prevent, Manage and Control Healthcare-Associated Infections in Portugal. A self-administered questionnaire was distributed to 30 physicians in two Portuguese hospitals in 2016.

Results: Participant physicians described the “lack of (or delayed) microbiology results” (30.0%), “no access to antibiotic susceptibility patterns” (16.7%), “lack of antimicrobial prescribing guidelines adapted to hospital epidemiology” (13.3%), and “quality of clinical data” (13.3%) as the major barriers on antibiotic prescription process. Moreover, when asked to suggest effective strategies to improve antibiotic prescription, “Education and training” was mentioned by 43.3% of respondents, followed by “easy access to local epidemiological data” and “development of antimicrobial prescribing guidelines adapted to hospital epidemiology” (16.7% each).

Conclusion: In order to reduce the barriers, felt by participant physicians on antibiotic prescription process, we suggest antibiotic stewardship interventions based on: (i) education on the antibiotic resistance problem, (ii) an easier access to microbiology results and local epidemiological data (e.g. information system) (ii) development of easy and accessible antimicrobial prescribing guidelines adapted to hospital epidemiology.

Disclosure of Interest: None Declared