EVALUATION OF AN ANTIMICROBIAL STEWARDSHIP INTERVENTION IN A GENERAL HOSPITAL

D. Gennimata, S. Siaveli, S. Bardi, C. Moraki, F. Marini

«Korgialenio-Benakio» Red Cross General Hospital, Pharmacy, Athens, Greece.

OBJECTIVES:
To evaluate the impact of an intervention that was designed to survey, audit and optimize the administration of colistin (C), daptomycin (D) and tigecycline (T) in a tertiary general hospital, as an additional measure in the already implemented hospital Antimicrobial Stewardship Programme (ASP).

STUDY DESIGN:
Medication review of all prescribed medication, including antimicrobials, is performed at the hospital pharmacy (HP) (Pandikouri et al., Eur J Hosp Pharm 2017;24, Suppl 1: page A244-A245).

Supplementary documentation (on printed forms) regarding the administration of the three antimicrobials (C, D, T) was requested, for six months in 2017 (26 weeks, February 13th to August 14th, 2017) and if not provided to the HP, a hospital Infectious Diseases Committee (IDC) member was assigned to audit the patient case and recommend appropriate adjustments, if required.

Data were collected and analyzed by Excel® and SPSS®.

RESULTS:

<table>
<thead>
<tr>
<th>DDDs100BD</th>
<th>COLISTIN IV</th>
<th>DAPTOMYCIN</th>
<th>TIGECYCLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDDs100BD A 2016</td>
<td>6,77</td>
<td>7,59</td>
<td>5,80</td>
</tr>
<tr>
<td>DDDs100BD B 2016</td>
<td>3,08</td>
<td>4,22</td>
<td>3,06</td>
</tr>
<tr>
<td>DDDs100BD A 2017</td>
<td>4,42</td>
<td>4,40</td>
<td>2,78</td>
</tr>
<tr>
<td>DDDs100BD IMP PERIOD</td>
<td>3,40</td>
<td>4,22</td>
<td>3,29</td>
</tr>
<tr>
<td>DDDs100BD B 2017</td>
<td>3,06</td>
<td>4,22</td>
<td>3,29</td>
</tr>
</tbody>
</table>

Treatment optimization, based on consequent IDC recommendations, was observed in 8 patients (9% of the 91 audited cases, out of 225 patients), whereas for all the other, treatment was according to clinical and therapeutic guidelines and recommendations.

DISCUSSION AND CONCLUSIONS:
National legislation often provides the guidelines for development of ASPs but their implementation relies on the perseverance and the communication skills of the hospital Infectious Diseases Committee (IDC) members rather than persuasion of clinicians to prescribe antimicrobials according to legislative and administrative guidelines and recommendations, as they usually rely on their clinical expertise, supported by clinical and therapeutic guidelines and recommendations, to make relevant decisions.

Although this ASP intervention had influenced antimicrobial consumption, it did not significantly impact patient outcomes. The intervention is further evaluated for cost-effectiveness and patient readmission events.

D. Gennimata: dimigenn@gmail.com, F. Marini: farmakeio@0310.szytelis.gov.gr

ACKNOWLEDGEMENTS:
We would like to thank the members of the IDC and the IT department of our hospital for a, beyond any expectations, excellent and constructive collaboration.