

Cantudo Cuenca MR¹, Dani Ben Abdel-Lah L¹, Martínez de la Plata JE², Muñoz Cejudo BM¹, Mora Mora MA¹
Servicio de Farmacia. ¹Hospital San Agustín, Linares; ²Hospital de Poniente, El Ejido

Background and importance

Antimicrobial stewardship programmes (ASPs) aims to optimise antimicrobial prescriptions, enhancing clinical outcomes, minimizing antimicrobial resistance and improving the quality and safety of patients care. Guidelines recommend a multidisciplinary team, however many hospitals have not infectious diseases (ID) physician support

Aim and objectives

To analyse the effectiveness of a **pharmacist-led ASP in a hospital without an ID physician**, with special focus on indicators of the hospital use of antimicrobial agents based on consumption¹

¹Gutiérrez-Urbón JM, Gil-Navarro MV, Moreno-Ramos F, et al. Indicadores del uso hospitalario de antimicrobianos basados en el consumo. *Farm Hosp.*2019;43(3):94-100

Material and methods

Pharmacist-led ASP 200-beds hospital 1 January – 30 June 2019

- a) The ASP was presented to the hospital physicians through face-to-face sessions
- b) To improve the prescription of antibiotics, we revised prophylaxis and antibiotic therapy in management protocols and we developed a guideline with local antimicrobial recommendations
- c) Clinical sessions were held on different pathologies included in the ASP
- d) Information about antimicrobial consumption rate was provided to physicians

In addition, the pharmacist revised daily all patients who had a course of antibiotics during their hospital admission, through an electronic prescription program

Recommendations were carried out to physicians related to antimicrobials spectrum, dose adjustment, stop longer courses of antibiotics, interactions, allergies and others

The consumption of defined daily dose (DDD)/1000 patient-days was taken from the first half of 2019 and it was compared to the same period last year

Results

248 recommendations

Indicators		2018	2019
Global consumption of antibiotics	- 19.7 %	931 DDD/1000 patient-days	747.9 DDD/1000 patient-days
Carbapenemic	- 41.3 %	21.3 DDD/1000 patient-days	12.5 DDD/1000 patient-days
Quinolones	- 34.9 %	192.7 DDD/1000 patient-days	125.5 DDD/1000 patient-days
Systemic antifungals	- 42.9 %	35.9 DDD/1000 patient-days	20.5 DDD/1000 patient-days
Ratio (cloxacilin + cefazolin) anti-MRSA agents		1.3	1.8

Conclusion and relevance

Pharmacist-led ASP has achieved a reduction in the consumption of antibiotics, specially carbapenemic and quinolones. In the absence of ID physician´s support and oversight, pharmacists could be key in the improvement of the use of antibiotics

