

## Point Prevalence Study of Antibiotic Use in a Governmental Hospital in Al-Qassim Region

Saleh A. ALREBISH <sup>1,2 \*</sup>, Hasan S. YUSUFOGLU <sup>2</sup>, Khulud K. ALHARBI <sup>3</sup>, & Nehad J. AHMED <sup>4</sup>

<sup>1</sup> *Medical Education Department, College of Medicine,  
Qassim University, Qassim, Saudi Arabia.*

<sup>2</sup> *College of Dentistry and Pharmacy, Buraydah Private Colleges,  
Buraydah, Saudi Arabia.*

<sup>3</sup> *Pharmacy Unit, King Saud Hospital, Unaizah,  
Qassim, Saudi Arabia.*

<sup>4</sup> *Department of Clinical Pharmacy, Pharmacy College, Prince Sattam Bin Abdulaziz  
University, Saudi Arabia.*

**SUMMARY.** The present study was conducted in a governmental hospital in Al Qassim Province to describe the pattern of antibiotic use in the hospital during the first 5 days of January 2021. The collected data included the type of pharmacies that dispense antibiotics, the antibiotics that were dispensed commonly by outpatient and inpatient pharmacies, dosage forms of the prescribed antibiotics, the department that prescribed antibiotics, and the personal data of the patients who received antibiotics. More than 55% of the patients were females and more than 84 % of them were from Saudi Arabia. The age of 56.39% of the patients was between 20 and 49 years. Most of the prescriptions were written by the emergency department (29.05%), obstetrics and gynecology department (23.11 %), and internal medicine department (18.05%). The most prescribed antibacterial agents were metronidazole (23.73%), amoxicillin/clavulanic acid (16.69%), and amoxicillin (9.15%), ciprofloxacin (8.65), and azithromycin (7.79%). The results of the study may serve as a helpful baseline for developing antimicrobial stewardship programs and facilitating the implementation of appropriate stewardship strategies in Al Qassim hospitals.

**RESUMEN.** El presente estudio se realizó en un hospital gubernamental en la provincia de Al Qassim para describir el patrón de uso de antibióticos en el hospital durante los primeros 5 días de enero de 2021. Los datos recopilados incluyeron el tipo de farmacias que dispensan antibióticos, los antibióticos que se dispensan comúnmente por farmacias ambulatorias y de hospitalización, formas farmacéuticas de los antibióticos recetados, el departamento que recetó antibióticos y los datos personales de los pacientes que recibieron antibióticos. Más del 55 % de los pacientes eran mujeres y más del 84 % de ellos eran de Arabia Saudita. La edad del 56,39% de los pacientes estaba entre 20 y 49 años. La mayoría de las recetas fueron emitidas por el servicio de urgencias (29,05%), servicio de obstetricia y ginecología (23,11%) y servicio de medicina interna (18,05%). Los antibacterianos más prescritos fueron metronidazol (23,73 %), amoxicilina/ácido clavulánico (16,69 %) y amoxicilina (9,15 %), ciprofloxacino (8,65 %) y azitromicina (7,79 %). Los resultados del estudio pueden servir como referencia útil para desarrollar programas de administración de antimicrobianos y facilitar la implementación de estrategias de administración adecuadas en los hospitales de Al Qassim.

**KEY WORDS:** antibiotics, antimicrobial, point prevalence, prescribing.

\* Author to whom Correspondence should be addressed. E-mail: s.alrebish@qu.edu.sa