Evaluation of antimicrobial consumption en 15 Chilean hospitals. Results of a collaborative work, 2013

Dominguez, I., Rosales, R., Cabello, A., Bavestrello, L., & Labarca, J. (2016). Evaluation of antimicrobial consumption en 15 Chilean hospitals: Results of a collaborative work, 2013. Revista chilena de infectologia: organo oficial de la Sociedad Chilena de Infectologia, 33(3), 307-312. <10.4067/s0716-10182016000300010> Accessed 23 Aug 2021.

Abstract

Surveillance of antimicrobial consumption is a central part in programs of antibiotic stewardship. However, in Chile there are no national data on antibiotic consumption representing a significant number of hospitals by clinical services. In 2013 a survey was sent to multiple Chilean hospitals to evaluate antimicrobial consumption in medical services (MS). surgery services (SS) and critical care units (ICU). We used the standardized methodology recommended by the WHO, using the number of DDD/100 days beds. In the MS and SS beta-lactam and no beta-lactam antibiotics commonly used were evaluated. In the ICU consumption vancomycin, linezolid, imipenem, merope-nem, colistin and tigecycline was evaluated. Fifteen hospitals reported the density of antimicrobial consumption. Ceftriaxone and cloxacillin were the most commonly used antibiotics in general services (average cloxacillin 4,9 DDD/100 bed days in MS and 8,0 DDD/100 in SS; ceftriaxone 13,5 DDD/100 in MS and 16,7 DDD/100 in SS). In the SS there was also a significant consumption of metronidazole (average 14,5 DDD/100 bed days). In the ICU there was an important variability of consumption of selected antibiotics. This study reports the average and range of antibiotic consumption in MS, SS, and ICU from a significant number of hospitals in the country, during 2013. This information allows hospitals to compare their consumption of antibiotics with a significant sample of Chilean hospitals. Analysis of this information should consider a careful interpretation according to the sample shown here and the reality of each hospital.

Keywords

Antimicrobial consumption, Antimicrobial stewardship, Defined daily doses, Antimicrobial resistance.