Fereshteh Raeessi, J Infect Dis Ther 2016, 4:7(Suppl)
http://dx.doi.org/10.4172/2332-0877.C1.017

Antibiotic utilization in the internal wards of a teaching hospital using ATC/DDD methodology: A comparison study

Fereshteh Raeessi
Azad University, Iran

Background: The emergence of antibiotic resistance has been a major spreading problem in the 21st century. Unfortunately, while infections caused by resistant microorganisms gradually increase, antibiotic options for treating them rapidly diminished. One of the factors which can be useful for rationalization and reduction of wasteful consumption of these valuable drugs is by monitoring the prescriptions and pattern of antibiotic usage, in order to establish appropriate measures for their control.

Methods: This study was a retrospective quantitative DUR, in order to determine the pattern of antibiotic consumption in the internal wards of Baqiyatallah Hospital. To perform a comparison with international studies, the anatomical therapeutic chemical classification and defined daily dose (ATC/DDD) methodology was used as recommended by the World Health Organization (WHO) and DDD per 100 bed-days of systemic anti-infectives (J class) used as a quantitative indicator.

Results: During the study period (1 year), total antibiotic consumption was 122.52 DDD/100 bed-days. The 3 most commonly used groups of drugs were carbapenems (26.83), third generation cephalosporins (22.76) and macrolides (20.82) in terms of DDD/100BD.

Conclusion: The first mostly prescribed group of anti-infectives was carbapenem. Considering similar studies in internal wards of France (2007) and Italy (2004), the carbapenem usage in our internal wards was 127.7 and 15.5 times higher in order of appearance. The higher use of systemic anti-infective agents in our study, especially broad-spectrum agents, implies the possibility of irrational prescribing, higher prescribed daily doses than DDDs, and also drug wastage. The results may serve as a basis for further investigations and advanced drug policies.

Biography

Fereshteh Raeessi has gained her PharmD degree in 2015 from Pharmaceutical Sciences Branch of Azad University, Iran. She is interested in medical and pharmaceutical research. She is the responsible Pharmacist in Zagros Darou, a pharmaceutical manufacturing company. Additionally, she is an Expert in Drug Poisoning Information Center in Tehran. She has published more than 3 papers in reputed journals.

raeessi.f@gmail.com

Notes: