

4th World Congress on

Infection Prevention and Control

November 28-29, 2016 Valencia, Spain

Restricted antimicrobial policy: A positive outcome on Gram-negative bacilli susceptibility pattern from inpatients wards in Indonesia

Cucunawangsih¹, Fonny Cokro² and Nata Pratama Hardjo Lugito¹¹University of Pelita Harapan, Indonesia²Siloam Teaching Hospitals, Indonesia

Background: The increased prevalence of MDRO following overutilization of broad spectrum antibiotics has become a global emergency. At the end of September 2013, a restricted antimicrobial control program (RACP) was released in our institution. In this study, we evaluated the influence of RACP on susceptibilities of Gram-negative bacilli (GNB) from patients admitted in wards of Siloam Teaching Hospitals, Tangerang, Indonesia.

Materials & Methods: This retrospective study enrolled 1,866 data of GNB from January 2013 to June 2015. The RACP implemented uses a front-end approach which requires authorization of RACP team member based on local antibiotic guideline and prior susceptibility pattern. The team consists of clinician, clinical pharmacist and clinical microbiologist, which functions to restrict the use of carbapenems, fourth generation cephalosporins and tigecycline. Cumulative susceptibility testing was done using an automated method from VITEX-2 Compact® or conventional disk diffusion in accordance with Clinical and Laboratory Standard Institute (CLSI) guideline.

Results: The predominant GNB isolated was *Escherichia coli* (21.7%) followed by *Klebsiella pneumonia* (16.6%), *Pseudomonas aeruginosa* (10.9%) and *Acinetobacter baumannii* (9.5%). There was a significant increase of GNB susceptibility against ceftazidime from 57% in 2013 to 73% in 2015. Similarly, the susceptibility thrived from 78-83% against imipenem, 74-75% against tigecycline and 63-64% against cefepime consecutively in 2013 to 2015. The susceptibility against meropenem in 2013 and 2015 was 80%.

Conclusions: The use of RACP yielded a positive effect on antibiotic susceptibility rate of GNB organisms. Furthermore, RACP is an effective program in lowering antibiotics utilization in our institution.

Biography

Cucunawangsih is affiliated to the University of Pelita Harapan, Indonesia.

cucunawangsih.fk@uph.edu

Notes: