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Antimicrobial resistance in Indonesia, prevalence, determinants and genetic basis

Publication status and date:

Published: 15/12/2009

Document Version

Other version

Citation for the published version (APA):

Lestari, ES. (2009). *Antimicrobial resistance in Indonesia, prevalence, determinants and genetic basis*. [Doctoral Thesis, Erasmus University Rotterdam]. Erasmus Universiteit Rotterdam (EUR).

[Link to publication on the EUR Research Information Portal](#)

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**Antimicrobial Resistance in Indonesia
Prevalence, determinants and genetic basis**

Endang Sri Lestari

1. Mapping of antimicrobial resistance patterns using standardized microbiological methods is needed to monitor trends in antimicrobial resistance in South East Asia. (*This thesis*)
2. Disk diffusion in agar with manual measurement of inhibition zones is a reliable method for antimicrobial susceptibility testing in low resource settings, but using an automated zone reader will improve its accuracy. (*This thesis*)
3. Proficiency testing of antimicrobial susceptibility must be done in clinical microbiology laboratories in Indonesia. (*This thesis*)
4. Antimicrobial resistance rates among commensal *E. coli* from discharge patients are higher than from patients on admission. (*This thesis*)
5. Recent antibiotic use is the most important determinant of resistance among commensal *E. coli*, but not commensal *S. aureus*, in both hospital and community populations in Indonesia. (*This thesis*)
6. The lack of hospital wide guidelines on antibiotic use and infection control in Indonesian hospitals fosters inappropriate use of antibiotics and antimicrobial resistance. (*Usman Hadi, thesis, Leiden 2009*)
7. Indonesian hospitals need to employ at least one full time, dedicated infection control nurse per 250 beds, constituting an infection control team supervised by a clinical microbiologist or an infectious disease clinician. (*Haley RW et al. The efficacy of infection surveillance and control programs in preventing nosocomial infections in US hospitals. Am J Epidemiol 1985;121:183-205*)
8. Indonesian doctors should follow the international “Surviving Sepsis Campaign” guidelines and routinely perform blood cultures prior to prescribing broad spectrum parenteral antibiotics. (*Dellinger RP et al. Surviving sepsis campaign. International guidelines for management of severe sepsis and septic shock: 2008. Crit Care Med 2008;36:296-327*)
9. Clinical microbiology specialists in Indonesia should not only work in their laboratories but also be present in the clinical setting. If not, they should refer to themselves as microbiologist only.
10. The future of clinical microbiology in Indonesia depends on the increase in the number of centres with Fellowship programs in this medical specialty.
11. Routine infusion of the antibiotic cefotaxime in patients with dengue haemorrhagic fever, a current habit in Indonesia, can be compared to filling up one’s car with distilled water instead of gasoline: it’s a mistake, it won’t work and produces nasty side effects.