

ABSTRACT

THE ANTIBIOTIC RESISTANCE PATTERN AND PLASMID PROFILES OF *Pseudomonas aeruginosa* IN ABDUL MOELOEK GENERAL HOSPITAL LAMPUNG'S PROVINCE.

By

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Pseudomonas aeruginosa is a nosocomial pathogenic bacteria. These bacteria has the remarkable ability to become resistant to some antibiotics. Bacterial resistance to antibiotics has become a global health problem, especially the phenomenon of MDR (*multidrug resistant*). Some research suggests that antibiotic resistance can be transferred to other bacteria via plasmids. This study was undertaken to determine the antibiotic resistance pattern and plasmid's profiles of *Pseudomonas aeruginosa* from RSUDAM Lampung's province. The resistance test of the isolates was performed following the Kirby-Bauer disc diffusion method. The plasmid were isolated using alkalyne lysis method by using Plasmid-Miniprep Kit, and electrophorated on 1% agarose gel. Thirty isolates of *Pseudomonas aeruginosa*, obtained from 782 samples in February to May 2015. The distribution of *Pseudomonas aeruginosa* among the clinical samples of pus 66,7%, sputum 16,7%, blood 13,3%, and urine 3,3%. All isolates were resistant to Ampicillin. Resistance to Chloramphenicol 83.3%, Cefoperazone 60%, Gentamicin 43,3%, Ciprofloxacin 36,7%, and Meropenem 6,7%. Based on electrophoresis results showed that 14 Isolates (46.8%) giving band plasmids. Thirteen of the isolates had a single plasmid band and only one isolate possessed two bands. The sizes of the plasmids ranged from 1,4 kb to 9 kb. Statistical analysis showed a correlation between the pattern of antibiotic resistance with plasmid's profiles of *Pseudomonas aeruginosa*.

Keywords : *Pseudomonas aeruginosa*, antibiotic-resistance, plasmid profiles.