ABSTRACT

COMPARATIVE ANALYSIS OF THE PRESENCE OF THE EXTENDED SPECTRUM BETA LACTAMASE (ESBL) IN KLEBSIELLA PNEUMONIAE FROM FAECES SAMPLES OF NURSES IN INPATIENT CHILD AND ADULT INPATIENT RSUD. DR. H. ABDUL MOELOEK PROVINSI LAMPUNG

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Background: Nosocomial infections are infections in patients who are in the process treatment in hospital. *Klebsiella pneumoniae* is one of the important bacterial pathogens in nosocomial infections. Class of beta-lactam antibiotics are the most commonly used antibiotics in the treatment of infections *Klebsiella pneumonia*. As the running time, antibiotics are becoming less sensitive due to improper usage, so it appears resistant bacteria that have mutated and produce enzymes *Extended Spectrum Beta lactamase* (ESBL). The aim of this study was to compare the presence of Extended-spectrum beta-lactamase (ESBL) produced by *Klebsiella pneumoniae* in faeces samples of nurses in inpatient adult and children's inpatient hospital Abdul Moeloek Bandar Lampung.

Methods: This research was conducted with cross sectional approach. *Klebsiella pneumoniae* examination conducted by the bacteria identification test of stool samples of nurses in inpatient children and adults. The resistance test by *Kirby bauer* method and test for the presence of ESBL by *Double Diffusion Test* (DDT) methods.

Results: Results of this study showed that *Klebsiella pneumoniae* was found 5.9% in inpatient children, 8.8% in the adult inpatient unit and besides *Klebsiella pneumoniae* are found as much as 85.3%. ESBL is not found in DDT test, so it could not analyzed statistically.

Conclusions: There is no comparison of the presence of *Extended-Spectrum beta-lactamase* (ESBL) produced by bacteria *Klebsiella pneumoniae* in faeces samples of nurses in inpatient adult and children's inpatient hospital Abdul Moeloek Bandar Lampung.

Keywords: ESBL, faeces, *Klebsiella pneumoniae*, nurse.