ABSTRACT

TESTING THE EXISTENCE OF EXTENDED SPECTRUM β-LACTAMASES ENZYMES (ESBL) IN *Escherichia coli* FROM CLINICAL ISOLATES FROM Dr. H. ABDUL MOELOEK HOSPITAL AND LAMPUNG PROVINCIAL REGIONAL HEALTH LABORATORY PERIOD OCTOBER - DECEMBER 2011

By

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The very significant enhanced of *E. coli* producer *Extended Spectrum β-Lactamase* (ESBL) were problem that need to be noticed and management immediately. Therapy choice for infection by *E. coli* now is very difficult by the Multi Drug Resistance (MDR). Accordingly bacteria producer *Extended Spectrum β-lactamase* have a circumscribed choice for therapy.

This study aims to determine the existence of enzyme Extended Spectrum *β*–lactamase at *E. coli* that isolated from many clinical isolates from Dr. H. Abdul Moeloek Hospital and Lampung Provincial Regional Health Laboratory at Bandar

Lampung. This study using experimental analytic study by *Double Disc Synergy Test* (DDST) method.

From this study found 19 isolates of *E. coli*. There are 16 (84,21%) isolates bacteria *E. coli* from Microbiology Laboratory of DR. H. Abdul Moeloek Hospital, and 3 (15,79%) isolates bacteria *E. coli* from LABKESDA Bandar Lampung. The resistant test to ceftazidime and cefotaxime found 14 (73,6%) *E. coli* isolates resistant for cefotaxime and 5 (26,3%) *E. coli* isolates resistant for ceftazidime. From the study of existence ESBL found 4 (21,1%) isolates *E. coli* shown positive produce ESBL.

Keywords : *Escherichia coli* isolates, DDST test, ESBL.