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.