ABSTRACT

Dwi Annisa Putri, NIM : 1534012, 2019. The comparison colony number of *Klebsiella Pneumoniae* bacteria on Eosin Methylene Blue (EMB) and Endo Agar Plate (EAP) culture medium. Bachelor Thesis. DIV Medical Analysis Study Program, Faculty of Medical Science, Universitas Katolik Musi Charitas Palembang.

Background: *Klebsiella pneumoniae* is a normal flora bacteria which commonly found on *tractus digestivus*. The laboratory measurement can be conducted by calculating the number of germ or bacteria which is inoculated on *Eosin Methylene Blue* and *Endo Agar Plate* culture medium. The present study aims to compare the number of bacterial colonies of *Klebsiella pneumoniae* which is regrown on *Eosin Methylene Blue Agar* and *Endo Agar Plate* culture medium.

Method: This present study is true experiment research which uses *Klebsiella pneumoniae* as the main sample. The study began by regrowing *Klebsiella pneumoniae* on *Eosin Methylene Blue* and *Endo Agar Plate*. All the deposited-*Klebsiella pneumoniae* is incubated at the temperature of 37ºC for 48 hours and calculated. Furthermore, the experiment is repeated for 16 times to prove all the obtained data repeatable. All the obtained data is statistically analyzed using *paired T-test* with a confidence level of 95%.

Result: The result shows that the average number of *Klebsiella pneumoniae* bacteria colonies grown on *Eosin Methylene Blue*and *Endo Agar Plate* are 67 colonies forming unit (CFU)/ml and 64 colonies forming unit (CFU)/ml, respectively. Furthermore, statistical analysis using *paired T-test* confirmed that there is no significant difference of *Klebsiella pneumoniae* colonies number grown on *Eosin Methylene Blue* and *Endo Agar Plate* culture mediums. It is based on the significance value (p-value) showing 0,664 which is higher than the significant level ($\alpha = 0,05$) (p-value > 0,05).

Conclusion: There is no significant difference of *Klebsiella pneumoniae* colonies number grown on *Eosin Methylene Blue* and *Endo Agar Plate* culture mediums

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Keywords: *Klebsiella pneumoniae*, *Eosin Methylene Blue*, *Endo Agar Plate*