

## ABSTRACT

**YuanaIdawati, NIM 1534007, 2019.** The difference in levels of lactic dehydrogenase in serum from centrifuged blood was 3000 rpm 5 minutes and 4400 rpm 3 minutes. Essay. DIV Medical Laboratory Technology Study Program at Faculty of Health Sciences Katolik Musi Charitas University.

**Background:** Speed and centrifugation time according to WHO is at least 10 minutes with a speed of 3662 rpm and according to KepMenKes No.1792 in 2010 uses a speed of 3000 rpm for 5 minutes. In health service laboratories, especially in LDH examination, the time to shorten Turn Around Time (TAT) can be reduced by accelerating the centrifugation time to 3 minutes. This study was conducted to determine differences in LDH levels in serum from blood that were centrifuged at 3000 rpm for 5 minutes and at speeds of 4400 rpm for 3 minutes.

**Method:** This type of study used is pre-experiment with posttest only design. The study location at the Palembang Health Laboratory Center. The subjects in this study were DIV Medical Laboratory Technology first level, amounting to 20 people obtained by total sampling. Research subjects who met the inclusion and exclusion criteria were taken for blood to check LDH levels. Blood from each subject was divided into two groups: centrifuged 3000 rpm 5 minutes and the group of tubes centrifuged 4400 rpm 3 minutes, then measured LDH levels in serum using the IFCC method. Data were analyzed using paired t test with a 95% confidence level.

**Results:** The average LDH results in the centrifuged blood group 3000 rpm 5 minutes as much as 306.3 U / L and 302.5 U / L in the blood group The results were tested statistically showed no significant difference ( $p = 0.609$ ) between levels LDH in centrifuged serum 3000 rpm 5 minutes and 4400 rpm 3 minutes.

**Conclusion:** LDH levels in serum from centrifuged blood of 3000 rpm for 5 minutes were not different from serum LDH levels from centrifuged blood 4400 rpm for 3 minutes.

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**Keywords:** Lactate dehydrogenase, centrifugation