

# THE DIFFERENCE OF EDTA BLOOD HEMATOCRIT VALUE IN AUTOANALYZER AND MICROCAPILLARY METHOD ON SUSPECTED DENGUE HEMORRHAGIC FEVER

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## ABSTRACT

Hematocrit examination is one of the laboratory requests requested by doctors to support the diagnosis of suspected DHF. Hematocrit values on suspects of dengue hemorrhagic fever can increase compared to initial values. Hematocrit examination at Penawangan 1 Health Center Grobogan District used microcapillary method and autoanalyzer method from venous blood samples. The *autoanalyzer* method is used when it coincides with other inspection parameters because in a single inspection it can produce results as desired. The microcapillary methods is used if it requires only a hematocrit examination, or the *analyzer* reagents runs out. This study is aimed to determine the comparison of EDTA blood hematocrit values of *autoanalyzer* and microcapillary methods in suspected dengue hemorrhagic fever. Type of research is analytic research with cross sectional. This study was conducted at the Penawangan 1 Public Health center in Grobogan District in June-July 2018. Samples of this research were taken from suspects of dengue hemorrhagic fever who had hematocrit examination, and then 32 samples were randomly taken based on calculation of large repeating sample. The results of this study showed that the hematocrit value of the *autoanalyzer* method was 30,60% -38,23%, with average of 38,23%, and standard deviation 4,23. The hematocrit value of microcapillary method was 30,33% - 48,00%, with average of 41,19%, and standard deviation 4,18. The hematocrit value of the microcapillary method is higher than *autoanalyzer* method, so statistically there is a significant difference between the two ( $p < 0,05$ ).

Keywords: hematocrit, autoanalyzer, microcapillary, dengue hemorrhagic fever

