

**“COMPARISON OF LEUKOCYTE COUNT IN VOLUME 1 CC 2 CC
AND 3 CC BLOOD TUBE K₃EDTA AFTER 2 HOURS STORAGE IN AC
(Air Conditioner) 18-22°C ROOM”**

ABSTRACT

Background : General factors affecting the laboratory are classified into three categories, namely pre-analytic, analytic and post-analytic. One of the factors that influence laboratory results at the pre-analytic are specimen collection and specimen handling. The volume of blood that is inserted into the vacutainer tube less than stipulation will cause crenation of blood cell so that the number of leukocytes decrease.

Objective : To find out the difference in the number of leukocytes against the volume of 1 cc 2 cc and 3 cc of K₃EDTA tube blood after 2 hours of storage at room temperature AC (Air Conditioner) 18-22 ° C.

Method : This research is a pre experimental design or non-design with a one-shot case study research design. This research was conducted at the Hematology Laboratory, Health Analyst Department of the Poltekkes Kemenkes Yogyakarta. The subjects used in this study were students of the Poltekkes Kemenkes Yogyakarta, DIII Laboratory Technology study program. Sample amounted to 12 respondents. Data were analyzed statistically using the One Sample Shapiro-Wilk data normality test and the One Way ANOVA difference test.

Result : The p significance data normality test was 0.907, 0.892 and 0.902. One Way ANOVA test results obtained with a significant value of 0.966. The average number of leukocytes in a volume of a volume of 1 cc was 7.03 thousand/ mm³, at a volume of 2 cc 7. 14 thousand/ mm³ and 3 cc was 7.22 thousand/ mm³.

Conclusion : There was no significant difference in the number of leukocytes in the volume of 1 cc 2 cc and 3 cc of K₃EDTA tube blood after 2 hours of storage at room temperature AC (Air Conditioner) 18-22 ° C.

Keyword : K₃EDTA blood, volume, leucocytes, room temperature AC (Air Conditioner) 18-22 ° C.

**“KOMPARASI HASIL JUMLAH LEUKOSIT PADA VOLUME 1 CC 2 CC
DAN 3 CC DARAH TABUNG K₃EDTA SETELAH 2 JAM
PENYIMPANAN DI SUHU RUANG AC (*Air Conditioner*) 18-22°C”**

ABSTRAK

Latar belakang : Faktor umum yang mempengaruhi laboratorium diklasifikasikan menjadi tiga kategori yaitu praanalitik, analitik dan pasca analitik. Salah satu faktor yang mempengaruhi hasil laboratorium pada tahap praanalitik yaitu pengumpulan spesimen dan penanganan spesimen. Volume darah yang dimasukkan ke tabung vacutainer kurang dari ketentuan akan mengakibatkan sel darah mengkerut (krenasi) sehingga jumlah leukosit menurun.

Tujuan : Untuk mengetahui perbedaan jumlah leukosit terhadap volume 1 cc 2 cc dan 3 cc darah tabung K₃EDTA setelah 2 jam penyimpanan di suhu ruang AC (*Air Conditioner*) 18-22°C.

Metode : Penelitian ini merupakan *pre experimental designs* atau *non design* dengan desain penelitian *one shot case study*. Penelitian ini dilakukan di Laboratorium Hematologi Jurusan Analis Kesehatan Poltekkes Kemenkes Yogyakarta. Subyek yang digunakan dalam penelitian ini adalah mahasiswa Poltekkes Kemenkes Yogyakarta program studi DIII Teknologi Laboratorium. Sampel berjumlah 12 responden. Data dianalisis secara statistik menggunakan uji normalitas data *One Sample Shapiro-Wilk* dan uji beda *One Way ANOVA*.

Hasil : Uji normalitas data signifikansi p 0.907, 0.892 dan 0.902. Uji *One Way ANOVA* didapatkan hasil dengan nilai signifikan sebesar 0.966. Rata-rata jumlah leukosit pada volume 1 cc 7.03 ribu/mm³, pada volume 2 cc 7.14 ribu/mm³ dan pada volume 3 cc sebesar 7.22 ribu/mm³.

Kesimpulan : Tidak ada perbedaan bermakna jumlah leukosit pada volume 1 cc 2 cc dan 3 cc darah tabung K₃EDTA setelah 2 jam penyimpanan di suhu ruang AC (*Air Conditioner*) 18-22°C.

Kata kunci : darah K₃EDTA, volume, leukosit, suhu ruang AC (*Air Conditioner*) 18-22°C.