DIFFERENCE IN LEUKOCYTE CELLS MEDIUM METHOD MANUAL AND IMPEDANCE

Faldea Ramadha Saputri¹, Budi Santosa², Zulfikar Husni Faruq³

1. D-III Health Analyst Study Program, Faculty of Nursing and Health, Muhammadiyah University Semarang
2. Hematology Laboratory Faculty of Nursing and Health Sciences University of Muhammadiyah Semarang

ABSTRACT

Examination of leukocyte type can be done using 2 methods, manual method and impedance method (automatic). The leukocyte count was calculated using manual method using peripheral blood smear, while the impedance method used the Hematology Analyzer BC-2600. The purpose of this study was to determine the diffcount ratio of cell medium using manual method and impedance method. This type of research is analytical research. Samples were taken randomly, namely as 16 semester 6 (six) students in class B D-III Health Analyst at the University of Muhammadiyah Semarang, the samples were examined using manual methods and impedance. Data analysis techniques to determine the comparison of the two methods using Dependent t Test analysis. The results of the examination showed that the average of the diffcount medium cell manual method was 7,3125%, while the average result of diffcount examination medium was 7,6813% impedance method. This shows the diffcount examination results for medium cell impedance method is higher than the manual method, but the difference is quite thin. Dependent t Test statistic test shows a significance value of 0.545 with a significance level of 0.05 which is 0.545 > 0.05 so that it can be concluded that there is no significant difference between the results of the manual method and the impedance.

Keywords: diffcount mid-cell, impedance, manual.