

ABSTRACT

Eko Sumanto. 2018. Comparison of Blood Glucose Levels Using Venous Blood Samples, Artery and Capillary Hexokinase Methods and Point of Care Tests. D-IV Health Analyst Study Program, Faculty of Health Sciences, Setia Budi University.

Glucose is a substance that is in the blood that comes from carbohydrates in food and drinks that we consume every day. For examination of blood glucose levels can usually use several blood samples that can use capillary blood and venous blood and the method used for examination is the point method of care test (POCT) and Hexokinase. This study aims to determine whether there are differences in blood glucose levels using capillary, venous and arterial blood samples using POCT and Hexokinase methods.

This research uses observational analytic research design with cross sectional approach. The research subjects were 30 samples, the normality of the data was tested by the Shapiro Wilk test with the significance of $p > 0.05$. Data analysis with Kruskal Wallis test with the significance of $p > 0.05$ and Wilcoxon test with a significance of $p > 0.05$.

The results obtained were $p = 0.374 > 0.05$, $p = 0.090 > 0.05$, $p = 0.108 > 0.05$ and $p = 0.069 > 0.05$. The results of this study concluded that there were no differences in blood glucose levels using venous, arterial and capillary blood samples with the POCT method, there were no significant differences in blood sugar levels using venous and arterial blood samples with the hexokinase method, there was no significant difference in blood sugar levels with Arterial blood samples using POCT and hexokinase methods, and there were no significant differences in blood sugar levels with venous blood samples using POCT and hexokinase methods.

Keywords: Blood Glucose, Veins, Artery, Capillary, Hexokinase, Point Of Care Test

