

## **COMPARISON OF BLOOD GLUCOSE LEVELS IN THE FIRST AND THIRD MONTHS USING TOOLS A1c METERS**

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### **ABSTRACT**

Diabetes Mellitus is a group of metabolic disorders with common symptoms of hyperglycemia. There are several laboratory examination tools to assess the level of adherence to the increase and decrease in blood glucose levels in patients with DM one of them is by using the tool A1c Meter. Excess examination using this tool can predict the condition of blood glucose in the long term and is not influenced by short-term lifestyle changes as well as acute disorders such as stress or related diseases. The purpose of this study to analyze the comparison of blood glucose examination results in the first month and third month after drug administration using A1c meter device. The research design used was analytic observational research with cross sectional approach using 16 samples which for blood glucose examination in first and third month used venous blood sample and examined using A1c Meter tool. Data were analyzed using the Kolmogorov-Smirnov test after that followed by Independent sample t-test result indicate there is a very significant difference between the examination of blood glucose levels using a spectrophotometer and A1c meters with P-value = 0.000 (<than the alpha value of 0.05).

Keywords : Diabetes Mellitus, Blood Glucose Levels, A1c Meters.