ABSTRACT

COMPARISON AND CORRELATION OF HBA1C BETWEEN PATIENTS TYPE 2 DIABETES MELLITUS OBESE AND TYPE 2 DIABETES MELLITUS NON OBESE AT ENDOCRINE UNIT RSUD DR. SOETOMO SURABAYA

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Background: Obesity causes the emergence of various risks for health. Fat accumulation encourage insulin resistance syndrome so obesity often worsens the complications of diabetes itself. Weight loss can improve glucose control and reduce cardiovascular risk in patients with type 2 DM. HbA1c is recommendation measurement for blood glucose.

Objective: This research aims to study the comparison of HbA1c between type 2 DM obese and non-obese in endocrine unit RSUD Dr. Soetomo Surabaya. Also researchers want to know the correlation between BMI and HbA1c.

Methods: This study was cross-sectional and observational analytic by accessing patient’s laboratory result and measure height, weight, and BMI.

Results: 50 patients were identified (24 males and 26 females), most of them between age 45-64 years old (68%). The variable is BMI ($p=0.022$) and HbA1c ($p=0.005$). Mann Whitney-U result is $p=0.159$ and Spearman test is $r=0.085$ and $p=0.558$.

Conclusion: There were no significant difference between HbA1c in type 2 DM obese and non-obese. Also, there is no relationship and not significant between BMI and HbA1c. With the lack of information, it still needs further studies with more complete data for better accuracy.

Keywords: Type 2 DM, HbA1c, BMI, Obese, Non obese