

ABSTRAC

Ika Amaliah Safitri, 2023. The Relationship between Glycemic Load and Physical Activity with Blood Glucose Levels Patients with type 2 diabetes mellitus outpatient care at the Dinoyo Health Center in Malang City, Supervisor: Dr.Ir. Rr. Endang Sutjiati, M. Kes. and Dr. Nur Rahman, STP., MP., RD.

Background: Diabetes mellitus is one of the chronic metabolic diseases that is currently a priority for the world. The 2018 Riskesdas data shows that the prevalence of diabetes mellitus based on a doctor's diagnosis in the population aged ≥ 15 years in Indonesia is 2%, while the prevalence in East Java is 2.6% (Riskesdas, 2018). Based on data from the Malang City Health Office for 2021, the Dinoyo Health Center ranks highest in the number of diabetes mellitus patients, with a total of 2,173 sufferers. Management of diabetes mellitus needs to be done so that the condition of the disease does not get worse. Management is carried out such as diet therapy by paying attention to the consumption of the glycemic load of food and carrying out physical activity. The glycemic load is looked at to measure the potential impact of a food on blood glucose levels. Eating foods with a high glycemic load can cause an increase in blood glucose levels. Physical activity plays a major role in controlling blood glucose. When doing physical activity, there is an increase in the use of glucose by active muscles so that it can directly cause a decrease in the amount of blood sugar levels in the body.

Objective: To determine the relationship between glycemic load and physical activity with glucose levels in type 2 diabetes mellitus outpatients at the Dinoyo Health Center, Malang City.

Method: This type of research is an observational study. The design of this study uses a cross-sectional design. The sampling method used was purposive sampling. Analysis of research data using the Spearman Rank correlation statistical test.

Results: The statistical test showed that the glycemic load obtained $p = 0.001$ and physical activity $p = 0.116$.

Conclusion: There is a relationship between glycemic load and blood glucose levels and there is no relationship between physical activity and blood glucose levels in type 2 diabetes mellitus outpatients at the Dinoyo Health Center, Malang City

Keywords: Diabetes Mellitus, Blood Glucose, Glycemic Load, Physical Activity