

ABSTRACT

Diabetes mellitus is a metabolic disorder disease caused by abnormalities in insulin secretion, insulin work, and/ or the combination of both, with a characteristic of excessed sugar in the blood. The general objective of the research was to study the relationship between diet accuracy and incident of obesity with fasting blood sugar levels of patients with type 2 Diabetes Mellitus (DM) and complications in Internal Medicine Clinic of Outpatient Installation at dr. Moh. Soewandhie Hospital Surabaya.

The research was conducted by analytical survey research in a comparative and correlative study with cross-sectional design. The samples were type 2 DM patients with macrovascular complications that distinguished according to controlled and uncontrolled fasting blood sugar levels, each of whom was as many as 25 people by simple random sampling. Data analysis for the comparative study used Chi-Square and Mann-Whitney test with $\alpha = 0,05$, whereas the data analysis for correlation study used Chi-square test with $\alpha = 0,05$.

The research results and statistical analysis showed that for the comparative study with Chi-square test there were no differences in diet schedules accuracy ($p=0,702$), but there were differences in the accuracy of amount of diet ($p=0,000$) and type ($p=0,000$) between controlled and uncontrolled groups of patients of with type 2 DM. Meanwhile, for comparative study with the Mann-Whitney test showed that there were differences in the incidence of obesity ($p=0,000$) between controlled and uncontrolled groups of patients with type 2 DM. Beside that, for correlative study with the Chi-square test showed that there was no relationship between diet schedule accuracy ($p=0,440$) and fasting blood sugar levels of patients with type 2 DM, nevertheless, there was a relationship between the amount of diet accuracy ($p=0,000$) and type ($p=0,000$), as well as the incidence of obesity ($p=0,000$) with fasting blood sugar levels of type 2 DM patients.

It needs to improve the quality of diet patterns (Total, Schedule, and, Type) by involving family and/ or those around people with diabetes to obtain diet accuracy in an effort to control blood sugar levels. In addition, it needs to improve and maintain of weight of people with diabetes toward Ideal Body Weight (BBI) through the monitoring of exercise and physical activity.

Keywords: Fasting Blood Sugar Levels, Diet Accuracy, Incidence of Obesity, Diabetes Mellitus