

## ABSTRAK

# HUBUNGAN TINGKAT PENGETAHUAN, PROPORSI ASUPAN KARBOHIDRAT, PROTEIN, DAN LEMAK DENGAN KADAR GLUKOSA DARAH PUASA PADA PENDERITA DIABETES MELLITUS TIPE 2 DI PUSKESMAS KEDUNGUMUNDU KOTA SEMARANG

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Pengetahuan penderita diabetes mellitus mengenai penyakit diabetes mellitus dan terapi dietnya dapat membantu penderita beradaptasi dan mampu melakukan pengendalian kadar glukosa darah dengan baik. Perencanaan makan merupakan salah satu faktor penting dalam pengelolaan diabetes mellitus yang mempengaruhi pengendalian kadar glukosa darah. Penelitian ini bertujuan mengetahui hubungan antara tingkat pengetahuan, proporsi asupan karbohidrat, protein, dan lemak dengan kadar glukosa darah puasa pada penderita diabetes mellitus tipe 2 di Puskesmas Kedungmundu Semarang.

Penelitian ini merupakan penelitian observasional dengan rancangan penelitian *cross sectional*. Besar sampel dalam penelitian 63 penderita yang mengikuti kegiatan Prolanis di Puskesmas Kedungmundu Semarang. Pengambilan sampel menggunakan metode *quota sampling*. Pengumpulan data pengetahuan dilakukan dengan wawancara menggunakan kuisioner pengetahuan dan data asupan makan dilakukan dengan wawancara menggunakan form *food recall* 24 jam. Data yang diperoleh diuji normalitas dengan uji *Kolmogorov-Smirnov* kemudian dianalisis secara univariat dan bivariat menggunakan uji korelasi *Rank Spearman*.

Hasil penelitian menunjukkan bahwa kadar glukosa darah puasa sebagian besar penderita tidak terkontrol (58,7%) dan tingkat pengetahuan sebagian besar penderita cukup (54,0%). Proporsi asupan karbohidrat (68,3%) dan proporsi asupan lemak (92,1%) penderita tidak tepat dan proporsi asupan protein penderita tepat (65,1%). Berdasarkan uji korelasi *rank spearman* diperoleh tidak ada hubungan antara tingkat pengetahuan (*p-value* 0,403), proporsi asupan karbohidrat (*p-value* 0,158), proporsi asupan protein (*p-value* 0,395) dengan kadar glukosa darah puasa. Ada hubungan yang signifikan antara proporsi asupan lemak dengan kadar glukosa darah puasa penderita DM Tipe 2 (*p-value* 0,041).

Kata Kunci : Diabetes Mellitus Tipe 2, Karbohidrat, Lemak, Pengetahuan, Protein.

## ABSTRACT

### THE RELATIONSHIP LEVEL KNOWLEDGE, PROPORTION OF CARBOHYDRATE, PROTEIN, AND FAT WITH A BLOOD GLUCOSE LEVEL IN TYPE 2 DIABETIC PATIENTS IN KEDUNGUMUNDU PUBLIC HEALTH CENTER SEMARANG CITY

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Knowledge of diabetes mellitus patient about diabetes mellitus disease and diet therapy can help patient to adapt and able to control blood glucose level well. Planning to eat is one important factor in the management of diabetes mellitus which affects the control of blood glucose levels. This study aims to determine the relationship between the level of knowledge, the proportion of carbohydrate, protein, and fat consumption with fasting blood glucose level in type 2 diabetes mellitus at Kedungmundu Public Health Center Semarang.

This research is an observational research with cross sectional research design. The sample in this research consisted of 63 patients who follow activity of Prolanis at Kedungmundu Public Health Center Semarang. Sampling using quota sampling method. Data collection of knowledge was conducted by interview using questionnaire of knowledge and data of food intake was done by interview using 24 hours food recall form. The data obtained were tested for normality by Kolmogorov-Smirnov test and then analyzed by univariate and bivariate using Rank Spearman correlation test.

The results showed that fasting blood glucose level of most patients was uncontrolled (58.7%) and the knowledge level of most sufferers (54.0%). The proportion of carbohydrate intake (68,3%) and proportion of fat intake (92,1%) of patients is not appropriate and the proportion of correct patient intake of protein (65,1%). Based on Spearman rank correlation test, there was no correlation between knowledge level (p-value 0,403), proportion of carbohydrate intake (p-value 0,158), proportion of protein intake (p-value 0,395) with fasting blood glucose level. There is a significant relationship between the proportion of fat intake with fasting blood glucose level of DM Type 2 patients (p-value 0.041).

**Keywords:** Diabetes Mellitus Type 2, Carbohydrate, Fat, Knowledge, Protein.