HUBUNGAN KADAR GLUKOSA DARAH PUASA DAN 2 JAM *POST PRANDIAL* DENGAN KEJADIAN RETINOPATI DIABETIKA PADA PASIEN DIABETES MELITUS TIPE 2

Studi Pada Fasilitas Kesehatan Tingkat Pertama (FKTP) Klinik Tanjung Purwokerto

ABSTRAK

Latar Belakang: Diabetes melitus tipe 2 menyebabkan komplikasi mikrovaskular pada mata yaitu retinopati diabetika. Faktor yang mempengaruhi retinopati diabetika adalah kadar glukosa darah. Diabetes melitus tipe 2 termasuk dalam 10 besar penyakit dengan kunjungan terbanyak di FKTP Klinik Tanjung Purwokerto.
Tujuan: Mengetahui hubungan kadar glukosa darah puasa dan 2 jam *post prandial* dengan kejadian retinopati diabetika pada pasien diabetes melitus tipe 2 di FKTP Klinik Tanjung Purwokerto.
Metode: Penelitian ini merupakan penelitian observasional analitik dengan metode *cross-sectional*. Jumlah sampel penelitian ini adalah 41 responden Program Pengelolaan Penyakit Kronis (PROLANIS) dengan teknik *consecutive sampling*. Pengumpulan data varibael kadar glukosa darah puasa menggunakan sampel darah vena dengan metode GOD-PAP, sedangkan sampel kapiler digunakan untuk pengukuran kadar glukosa darah 2 jam *post prandial*. Variabel kejadian retinopati dikumpulkan dengan funduskopi posterior. Analisis hipotesis menggunakan uji *Chi-square*.
Hasil: Hasil penelitian menunjukkan kadar glukosa darah puasa terbanyak dalam kategori tinggi (≥126 mg/dL) sebanyak 31 responden (76%), kadar glukosa darah 2 jam *post prandial* terbanyak dalam kategori tinggi (≥200 mg/dL), dan sebanyak 11 responden (27%) mengalami retinopati diabetika. Hasil analisis bivariat antara kadar glukosa darah puasa dengan kejadian retinopati diabetika menggunakan uji *Chi-square* menunjukkan *p value* = 0,795. Hasil analisis bivariat antara kadar glukosa darah 2 jam *post prandial* dengan kejadian retinopati diabetika menggunakan uji *Chi-square* menunjukkan *p value* = 0,177.
Kesimpulan: Tidak terdapat hubungan signifikan antara kadar glukosa darah puasa dan 2 jam *post prandial* dengan kejadian retinopati pada pasien diabetes mellitus tipe 2 di FKTP Klinik Tanjung Purwokerto.

Kata Kunci: Kadar Glukosa Darah, Retinopati Diabetika

CORRELATION BETWEEN FASTING AND 2-HOURS POST PRANDIAL BLOOD GLUCOSE LEVELS WITH DIABETIC RETINOPATHY IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

Study at the First Level Health Facility (FKTP) at Tanjung Purwokerto Clinic

ABSTRACT

***Background**: Type 2 diabetes mellitus causes microvascular complication in eyes which is diabetic retinopathy. Factor that causes diabetic retinopathy is blood glucose levels. Type 2 diabetes mellitus was included in top 10 diseases that had most visitation at FKTP of Tanjung Purwokerto Clinic.*

***Objective**: The objective of the study was to determine correlation between fasting and 2-hours post prandial blood glucose levels with diabetic retinopathy in patients with type 2 diabetes mellitus at FKTP of Tanjung Purwokerto Clinic.*

***Methods**: The study was analytical observational with cross-sectional method. Total sampling was 41 respondents of chronic disesases management program (PROLANIS) by consecutive sampling method. Vein blood was used for fasting blood glucose levels and capillary blood used for 2-hours post prandial blood glucose. Diabetic retinopathy was knew by posterior funduscopy. Hypothesis analysis used Chi-square test.*

***Result**: The results show the highest fasting blood glucose level is in high category (≥126 mg/dL) as many as 31 respondents (76%), the highest levels of 2-hours post prandial blood glucose is in high category (≥200 mg/dL), and 11 respondents (27%) have diabetic retinopathy. The result of bivariat analysis between fasting blood glucose levels with diabetic retinopathy uses Chi-square statistic with p value=0.795. The result of bivariat analytics between 2-hours post prandial blood glucose levels with diabetic retinopathy uses Chi-square statistic with p value=0.177.*

***Conclusion**: There are not significant correlation between fasting and 2-hours post prandial blood glucose levels with diabetic retinopathy in patients with type 2 diabetes mellitus at FKTP of Tanjung Purwokerto Clinic.*

***Keywords**: Blood Glucose Levels, Diabetic Retinopathy*