ABSTRAK

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SIFA SALSABILA
HUBUNGAN ASUPAN VITAMIN C DAN KROMIUM, KEPATUHAN DIET, SERTA TINGKAT STRESS TERHADAP KADAR GULA DARAH PASIEN RAWAT JALAN DIABETES MELLITUS TIPE II DI PUSKESMAS BINONG KABUPATEN TANGERANG

VI Bab, 112 Halaman, 18 Tabel, 5 Gambar, 8 Lampiran

Latar Belakang : Prevalensi diabetes mellitus (DM) meningkat signifikan (3,4% pada 2018) jika dibandingkan dengan survei nasional sebelumnya (1,3% pada 2010, 2,1% pada 2013). DM Tipe 2 *(T2DM)* merupakan gangguan metabolisme yang kompleks karena terjadi hiperglikemia atau kadar glukosa darah yang melebihi batas normal. Hiperglikemia terjadi karena beberapa faktor diantaranya adalah asupan vitamin C, asupan kromium, kepatuhan diet, dan tingkat stress.
Tujuan : Menganalisis hubungan antara asupan vitamin C dan kromium, kepatuhan diet, serta stress dengan kadar gula darah pasien rawat jalan diabetes mellitus tipe 2.
Metode Penelitian : Penelitian potong lintang ini melibatkan 90 responden usia 45-60. Data kadar gula darah menggunakan pengecekan secara sewaktu dengan metode *perifer* diperoleh dari hasil rekam medis. Asupan vitamin C dan kromium dinilai dengan kuesioner frekuensi makanan semi-kuantitatif (SQ-FFQ). Kepatuhan diet dinilai dengan kuesioner kepatuhan diet DM sedangkan tingkat stress dianalisis dengan kuesioner DASS (kuesioner depresi, kecemasan, stress). Analisis data menggunakan uji korelasi *Pearson*.
Hasil Penelitian : Asupan vitamin C ($p = 0.030$, $r = -0.22$) dan tingkat stress ($p = 0.000$, $r = 0.31$) berhubungan secara bermakna dengan kadar gula darah. Tidak ada hubungan antara asupan kromium ($p = 0.209$, $r = 0.13$) dan kepatuhan diet ($p = 0.29$, $r = -0.11$) terhadap kadar gula darah.
Kesimpulan : Asupan vitamin C dan tingkat stress dapat memodifikasi kadar gula darah pada pasien DM rawat jalan. Pasien sangat dianjurkan untuk mencukupi asupan vitamin C harian dan menjaga kesehatan mental.

Kata Kunci : Diabetes mellitus tipe 2, kadar gula darah, vitamin C, kromium, kepatuhan diet, tingkat stress

ABSTRACT

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THE RELATIONSHIP OF VITAMIN C AND CHROMIUM INTAKE, DIET COMPLIANCE, AND STRESS LEVEL TOWARDS BLOOD SUGAR LEVELS IN OUTCOME DIABETES MELLITUS TYPE II PATIENTS IN PUSKEMAS BINONG, KABUPATEN TANGERANG

VI Chapter, 112 Pages, 18 Tables, 5 Pictures, 8 Appendices

Background: *Prevalence of diabetes mellitus (DM) increase significantly (3.4% in 2018) if compare to previous national survey (1.3% in 2010, 2.1% in 2013). Type 2 DM (T2DM) is a complex metabolic disorder that characterized as hyperglycemia or blood glucose levels that exceed normal limits. Hyperglycemia may occur due to several factors including inadequate intake of vitamin C and chromium, poor dietary compliance, and high stress levels.*
Objective: *To examine the relationship between intake of vitamin C and chromium, dietary compliance, and stress levels with blood sugar levels in outpatients T2DM.*
Methods: *This was a cross sectional study that involved 90 outpatient T2DM aged 45-60 years old. Data on blood sugar levels were obtained from medical records, intake of vitamin C and chromium assessed by semi-quantitative food frequency (SQ-FFQ). Dietary compliance (DM Dietary Compliance) and stress levels (DASS, Depression Anxiety Stress Scale) are assessed by validated structured questionnaires. Pearson correlation test was performed to answer research question.*
Result: *Habitual intake of vitamin C ($p = 0.030$, $r = -0.22$) and stress level ($p = 0.000$, $r = 0.31$) significantly associated with blood sugar levels. There is no significant correlation between intake of chromium ($p = 0.209$, $r = 0.13$) and dietary compliance ($p = 0.29$, $r = -0.11$) on blood sugar levels.*
Conclusion: *Vitamin C intake and stress levels may modify blood sugar levels in T2DM patients. Adequate intake of vitamin C and good mental health should be promoted among this patients.*
Keywords: *Type 2 of diabetes mellitus, blood sugar levels, vitamin C, chromium, dietary compliance, stress levels*