

THE RELATIONSHIP BETWEEN BLOOD GLUCOSE LEVELS AND THE DEGREE OF TOOTH MOBILITY IN PATIENTS WITH DIABETES MELLITUS

Lia Fetti Hidayati¹, Dwi Suyatmi², Etty Yuniarly³
Dental Nursing Majors Poltekkes Kemenkes Yogyakarta
JL. Tatabumi No. 3 Banyuraden, Gamping, Sleman
Email: lia_fetti@ugm.ac.id

ABSTRACT

Diabetes Mellitus (DM) is a metabolic disease characterized by high sugar levels (hyperglycemia) caused by impaired insulin secretion or insulin resistance or both due to pancreatic disorders. DM can cause several manifestations in the oral cavity, including gingivitis, periodontitis, and increasing degrees of tooth luxation. Based on the preliminary study, it was shown that patients who experienced 80% of tooth mobility had blood glucose levels above normal. The aim of this study is to find out the relationship between blood glucose levels and the degree of tooth mobility in patients with DM. The method of this study used analytical survey with a cross-sectional approach. The population of this study was patients with DM at a health primary center. Data were collected by quota sampling and were analyzed using the Kendall's tau test. The results show that the patients have 55.3% of criteria for moderate blood glucose levels and experience 39.5% of the first-degree tooth mobility. Based on the results of the analysis, the p-value of 0.000 ($p < \alpha$) is obtained. Therefore, it can be concluded that blood glucose levels are related to the degree of tooth mobility in patients with DM.

Keywords: diabetes mellitus, blood glucose levels, HbA1c, degree of tooth mobility

¹) Student of Dental Nursing Majors Poltekkes Kemenkes Yogyakarta

^{2,3}) Lecturer Dental Nursing Majors Poltekkes Kemenkes Yogyakarta

HUBUNGAN KADAR GULA DARAH DENGAN DERAJAT KEGOYAHAN GIGI PADA PASIEN DIABETES MELLITUS

Lia Fetti Hidayati¹, Dwi Suyatmi², Etty Yuniarly³
Jurusan Keperawatan Gigi Poltekkes Kemenkes Yogyakarta
Jl. Tatabumi No. 3 Banyuraden, Gamping, Sleman
Email : lia_fetti@ugm.ac.id

ABSTRAK

Diabetes Mellitus (DM) adalah penyakit metabolik yang ditandai dengan kadar gula yang tinggi (*hiperglikemia*) yang disebabkan oleh gangguan sekresi insulin, dan resistensi insulin atau keduanya akibat gangguan pankreas. Penyakit DM dapat menimbulkan beberapa manifestasi didalam rongga mulut diantaranya adalah terjadinya gingivitis, *periodontitis*, dan peningkatan derajat kegoyahan gigi. Dari studi pendahuluan menunjukan bahwa pasien yang mengalami kegoyahan gigi 80% memiliki kadar gula darah diatas normal. Penelitian ini bertujuan untuk mengetahui hubungan kadar gula darah dengan derajat kegoyahan gigi pada pasien diabetes mellitus. Metode Penelitian ini menggunakan desain penelitian survey analitik dengan pendekatan *cross sectional*. Populasi studi penelitian ini adalah pasien diabetes mellitus di Puskesmas. Pengambilan data dilakukan secara *quota sampling*. Analisa data menggunakan uji *kendall's tau*. Hasil penelitian menunjukan pasien memiliki kriteria kadar gula darah sedang sebanyak 55,3% dan pasien mengalami kegoyahan gigi derajat I sebanyak 39,5%. Hasil analisis diperoleh nilai p sebesar 0,000 ($p < \alpha$). Dapat di tarik kesimpulan bahwa kadar gula darah berhubungan dengan derajat kegoyahan gigi pada pasien diabetes mellitus.

Kata kunci: diabetes mellitus, kadar gula darah, HbA1c, derajat kegoyahan gigi

¹⁾ Mahasiswa Jurusan Keperawatan Gigi Poltekkes Kemenkes Yogyakarta

^{2,3)} Dosen Jurusan Keperawatan Gigi Poltekkes Kemenkes Yogyakarta