

**HUBUNGAN KONSUMSI TEH DAUN KELOR (*Moringa Oleifera L.*)
DENGAN KADAR GLUKOSA DARAH PUASA PENDERITA
DIABETES MELITUS DENGAN TERAPI METFORMIN DAN
GLIMEPIRIDE DI KLINIK PRATAMA SIDABOWA
KABUPATEN BANYUMAS**

ABSTRAK

Latar Belakang – Prevalensi Diabetes Melitus yang semakin meningkat membutuhkan penatalaksanaan komprehensif empat pilar. Terapi farmakologis standard kombinasi antara metformin dan glimepiride dapat ditambahkan dengan terapi komplementer. Bahan herbal merupakan salah satu jenis terapi komplementer yang dapat dikonsumsi oleh penderita Diabetes Melitus. Daun kelor (*Moringa oleifera L.*) berpotensi sebagai terapi komplementer untuk mengendalikan kadar glukosa darah dengan kandungan senyawa antioksidan yang dapat menetralkan radikal bebas, sehingga memperbaiki sensitivitas insulin.

Tujuan – Mengetahui hubungan konsumsi teh daun kelor dengan kadar glukosa darah puasa penderita diabetes melitus dengan terapi kombinasi metformin dan glimepiride di Klinik Pratama Sidabowa Kabupaten Banyumas.

Metode – Penelitian ini menggunakan desain observasional analitik dengan pendekatan *cross-sectional*. Data penelitian diambil dari data sekunder pada penderita diabetes melitus di Klinik Sidabowa Kabupaten Banyumas yang mengonsumsi teh daun kelor dengan dosis 5,32 gram/hari selama 14 hari. Subjek berjumlah 17 responden. Analisis data yang digunakan yaitu uji nonparametrik *Kruskall-wallis*.

Hasil – Nilai median kadar glukosa darah puasa pada kelompok responden yang rutin minum teh daun kelor yaitu 130,5 (112-154) mg/dL, yang tidak rutin 129 (113-177) mg/dL, dan tidak minum teh daun kelor 149 (78-363) mg/dL. Hasil uji nonparametrik *Kruskall-wallis* $p = 0,772$.

Kesimpulan – Pada penelitian ini tidak terdapat perbedaan signifikan kadar glukosa darah puasa dari kelompok yang rutin, tidak rutin, dan tidak minum teh daun kelor pada penderita diabetes melitus di Klinik Sidabowa Kabupaten Banyumas.

Kata kunci: diabetes melitus, metformin, glimepiride, kadar glukosa darah puasa, teh daun kelor

**THE RELATIONSHIP BETWEEN OF CONSUMPTION OF
MORINGA LEAF TEA (*Moringa oleifera* L.) WITH
FASTING BLOOD GLUCOSE LEVELS IN
DIABETES MELLITUS PATIENTS WITH METFORMIN AND
GLIMEPIRIDE THERAPY AT THE PRATAMA SIDABOWA CLINIC
BANYUMAS DISTRICT**

ABSTRACT

Background – The increasing prevalence of Diabetes Mellitus necessitates comprehensive management based on four pillars. Standard pharmacological therapy, which typically involves a combination of metformin and glimepiride, can be supplemented with complementary therapies. Herbal ingredients are one form of complementary therapy that can be consumed by individuals with Diabetes Mellitus. Moringa leaves (*Moringa oleifera* L.) have potential as a complementary therapy for controlling blood glucose levels, as they contain antioxidant compounds capable of neutralizing free radicals, thereby improving insulin sensitivity.

Objective – To determine the relationship between the consumption of Moringa leaf tea and fasting blood glucose levels in diabetes mellitus patients who were treated with metformin and glimepiride at the Pratama Sidabowa Clinic, Banyumas Regency.

Methods – This research used an analytical observational design with a cross-sectional approach. Research data were taken from secondary data on diabetes mellitus sufferers at the Sidabowa Clinic, Banyumas Regency, who consumed Moringa leaf tea at a dose of 5.32 grams/day for 14 days. The subjects numbered 17 respondents. The data analysis used was the Kruskal-Wallis nonparametric test.

Result – The median fasting blood glucose level in the group of respondents who regularly drink Moringa leaf tea is 130.5 (112-154) mg/dL, in those who do not regularly drink it is 129 (113-177) mg/dL, and in those who do not drink Moringa leaf tea at all is 149 (78-363) mg/dL. The results of the Kruskal-Wallis nonparametric test show a p-value of 0.772.

Conclusion – In this study, there is no significant difference in fasting blood glucose levels among the groups who regularly drink, do not regularly drink, and do not drink Moringa leaf tea in Diabetes Mellitus sufferers at the Sidabowa Clinic, Banyumas Regency.

Keywords: diabetes mellitus, metformin, glimepiride, fasting blood glucose levels, moringa leaf tea