

## ABSTRAK

**Latar Belakang:** Hipertensi menjadi salah satu penyakit yang menjadi faktor risiko terbesar kematian. Faktor-faktor yang menjadi penyebab terjadinya hipertensi antara lain toksin, faktor genetik, umur, jenis kelamin, etnis, stress, kegemukan, nutrisi, merokok, narkoba, alkohol, kafein, kurang olah raga, kolesterol tinggi. Ekstrak air daun kelor memiliki kandungan senyawa aktif alkaloid, saponin, tannin, fenol, flavonoid, triterpenoid, steroid, dan glikosida. Daun kelor mempunyai kandungan kalium yang memelihara tekanan darah dalam kondisi normal, serta kaya akan potassium yang mengendalikan kadar sodium dalam darah untuk menurunkan tekanan darah tinggi.

**Tujuan:** Mengetahui pengaruh pemberian air seduhan daun kelor terhadap penurunan tekanan darah pada penderita hipertensi di Desa Pematang Kuala Kecamatan Teluk Mengkudu Kabupaten Serdang Bedagai

**Metode:** Jenis penelitian yang digunakan dalam penelitian ini adalah *pre-eksperimental* dengan *one group pretest posttest design*. Besar sampel 25 responden yang memenuhi kriteria inklusi dan pengujian hipotesis menggunakan analisis korelasi uji *Wilcoxon signed rank test*.

**Hasil:** Demografi berdasarkan usia responden terbanyak adalah umur 35-45 tahun yaitu sebanyak 9 responden (36%). Demografi berdasarkan jenis kelamin didapatkan, jenis kelamin perempuan lebih banyak yaitu 16 responden (64%). Variabel tekanan darah sebelum intervensi (*pre-test*), responden yang mayoritas tekanan darah >140/90 mmhg sebanyak 25 orang (100%) dan berdasarkan variabel tekanan darah sesudah intervensi (*post test*), responden yang mayoritas tekanan darah 120/80-140/89 sebanyak 13 orang (52%) dan minoritas tekanan darah >140/90 mmhg sebanyak 12 orang (48%). Hasil uji *Wilcoxon signed rank test* diperoleh nilai  $Z = -3,464$  dengan nilai *sign* 0,001 *p-Value* <0,005

**Kesimpulan :** Dari hasil uji *Wilcoxon signed rank test* menunjukkan bahwa terdapat pengaruh seduhan daun kelor terhadap tekanan darah penderita hipertensi.

**Kata Kunci:** Daun Kelor, Hipertensi, *Moringa Olifera*, Tekanan darah

## ABSTRACT

**Background:** Hypertension is one of the diseases that is the biggest risk factor for death. Factors that cause hypertension include toxins, genetic factors, age, gender, ethnicity, stress, obesity, nutrition, smoking, drugs, alcohol, caffeine, lack of exercise, high cholesterol. Moringa leaf water extract contains active compounds of alkaloids, saponins, tannins, phenols, flavonoids, triterpenoids, steroids and glycosides. Moringa leaves contain potassium which maintains blood pressure in normal conditions, and is rich in potassium which controls sodium levels in the blood to reduce high blood pressure.

**Objective:** To determine the effect of giving water steeped in Moringa leaves on reducing blood pressure in hypertension sufferers in Pematang Kuala Village, Teluk Mengkudu District, Serdang Bedagai Regency

**Method:** The type of research used in this research is pre-experimental with a one group pretest posttest design. The sample size was 25 respondents who met the inclusion criteria and hypothesis testing using the Wilcoxon signed rank test correlation analysis.

**Results:** Demographics based on the age of the majority of respondents were 35-45 years old, namely 9 respondents (36%). Demographics based on gender were obtained, the female gender was more numerous, namely 16 respondents (64%). The blood pressure variable before the intervention (pre-test), the majority of respondents had blood pressure  $>140/90$  mmHg as many as 25 people (100%) and based on the blood pressure variable after the intervention (post test), the majority of respondents had blood pressure 120/80-140 /89 as many as 13 people (52%) and a minority with blood pressure  $>140/90$  mmHg as many as 12 people (48%). The results of the Wilcoxon signed rank test obtained a Z value = -3.464 with a sign value of 0.001 p-Value  $<0.005$

**Conclusion:** From the results of the Wilcoxon signed rank test, it shows that there is an effect of boiled Moringa leaves on the blood pressure of hypertensive sufferers.

**Keywords:** Moringa leaves, hypertension, Moringa Olifera, Blood pressure