

**THE EFFECT OF BUTTERFLY PEA FLOWER TEA (*Clitoria ternatea*) ON  
DECREASE BLOOD PRESSURE IN THE EMPLOYEE OF POLTEKKES  
KEMENKES YOGYAKARTA**

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**ABSTRACT**

**Background :** Hypertension in general is a condition without symptoms, where the abnormally high pressure in the arteries increases the risk of stroke, aneurysm, heart failure, heart attack and kidney damage. Prevalence of hypertension in Indonesia has increased from 25,8% to 34,1%. The prevalence of hypertension in Yogyakarta is 9,94% or 32,248 people. Butterfly pea flower *Clitoria ternatea* has anthocyanin bioactive components which exhibit antihypertensive, antioxidant, antidiabetic, etc.

**Research Objectives :** To determine the effect of giving butterfly pea flower *Clitoria ternatea* extract tea on blood pressure in the employee of Poltekkes Kemenkes Yogyakarta.

**Methods :** The method used was quasi experimental with a pretest-posttest research design without control design. This research was conducted on January-February 2022. The population of this research was the employee of Poltekkes Kemenkes Yogyakarta. The sample calculation of this research used paired analytic-comparative and obtained 23 sample. The data analysis used was *paired sample t-test* and *wilcoxon test*.

**Result :** Mean blood pressure before intervention was 137,48±10,47 mmHg for systolic blood pressure and 88,48±6,36 mmHg for diastolic blood pressure. Meanwhile mean blood pressure after intervention was 125,91±14,22 mmHg for systolic blood pressure and 82,04±7,93 mmHg for diastolic blood pressure. The result of the research showed that there is an effect of giving butterfly pea *Clitoria ternatea* tea on systolic blood pressure (p=0,000) and diastolic blood pressure (p=0,001) in the employee of Poltekkes Kemenkes Yogyakarta.

**Conclusion :** There is an effect of giving butterfly pea *Clitoria ternatea* tea on blood pressure in the employee of Poltekkes Kemenkes Yogyakarta.

**Keywords :** Hypertension, Blood Pressure, Butterfly Pea Flower, Anthocyanin, Butterfly Pea Flower Tea

**PENGARUH PEMBERIAN TEH SARI BUNGA TELANG (*Clitoria ternatea*) TERHADAP PENURUNAN TEKANAN DARAH PADA KARYAWAN POLTEKKES KEMENKES YOGYAKARTA**

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**ABSTRAK**

**Latar Belakang :** Hipertensi secara umum adalah suatu keadaan tanpa gejala, dimana tekanan yang abnormal tinggi di dalam arteri menyebabkan meningkatnya resiko terhadap stroke, aneurisma, gagal jantung, serangan jantung dan kerusakan ginjal. Prevalensi hipertensi di Indonesia mengalami peningkatan dari 25,8% menjadi sebesar 34,1%. Prevalensi hipertensi di Yogyakarta sebesar 9,94% atau 32,248 jiwa. Bunga telang *Clitoria ternatea* memiliki komponen bioaktif antosianin yang menunjukkan sifat antihipertensi, antioksidan, antidiabetes, dll.

**Tujuan Penelitian :** Mengetahui pengaruh pemberian teh sari bunga telang *Clitoria ternatea* terhadap tekanan darah pada karyawan Poltekkes Kemenkes Yogyakarta.

**Metode Penelitian :** Metode yang digunakan *quasy experimental* dengan menggunakan desain penelitian *pretest-posttest without control design*. Penelitian ini dilaksanakan pada bulan Januari-Februari 2022. Populasi penelitian ini adalah karyawan Poltekkes Kemenkes Yogyakarta. Pengambilan sampel penelitian ini menggunakan rumus analitik komparatif-numerik berpasangan dan diperoleh 23 sampel. Analisis data yang digunakan adalah *uji paired sample t-test* dan *uji wilcoxon*.

**Hasil Penelitian :** Rata-rata tekanan darah sebelum intervensi adalah  $137,48 \pm 10,47$  mmHg untuk tekanan darah sistolik dan  $88,48 \pm 6,36$  mmHg untuk tekanan darah diastolik. Sedangkan rata-rata tekanan darah setelah intervensi  $125,91 \pm 14,22$  mmHg untuk tekanan darah sistolik dan  $82,04 \pm 7,93$  mmHg untuk tekanan darah diastolik. Hasil penelitian menunjukkan ada pengaruh pemberian teh sari bunga telang terhadap penurunan tekanan darah sistolik ( $p=0,000$ ) dan tekanan darah diastolik ( $p=0,001$ ) pada karyawan Poltekkes Kemenkes Yogyakarta.

**Kesimpulan :** Ada pengaruh pemberian teh sari bunga telang terhadap penurunan tekanan darah pada karyawan Poltekkes Kemenkes Yogyakarta.

**Kata Kunci :** Hipertensi, Tekanan Darah, Bunga Telang, Antosianin, Teh Sari Bunga Telang