ABSTRACT

Background: Pre-hypertension is a category used to identify a patient who is at high risk to have hypertension. Pre-hypertension is the level of someone's blood pressure at 130/90 or 80/89. Based on the Journal Neurology from University of California, San Diego School of Medicine that people who have blood pressure, which tends to high or pre-hypertension, have 55 percent higher risk of stroke compare to people with normal blood pressure. The use of modern hypertension medications can cause side effects, therefore traditional medicine could be an option by the community, and one of them is a banana *(Musa paradisiaca)*. The activities of Angiotensin Converting Enzyme Inhibitors (ACE-I) contained in bananas can lower blood pressure inside the body. Banana also contains high levels of potassium and low levels in sodium, so it is good for people with pre-hypertension.

Methods: The type of this research is a method pre-experimental (one group pretest and posttest design). They were 25 people and had been meeting the exclusion criteria and inclusion criteria needed. In this study, there was only one variable, namely blood pressure response is the reactivity value obtained by calculating the difference between the pretest and posttest. Data analysis was using SPSS data processing that is paired sample t-test for normally distributed data and *Wilcoxon signed rank test* for abnormal distributed data.

Result: Pretest-posttest systolic value by Wilcoxon signed rank test for asymp. Sig (2-tailed) p is 0.0001 (<0.05), so that H1 is accepted, which means there is a significant difference between the systolic blood pressure before and after treatment. So was the diastolic, diastolic value pretest-posttest by Wilcoxon signed rank test for asymp. Sig (2-tailed) p is 0.0001 (<0.05), so that H1 is accepted, which means there is a significant difference between the diastolic blood pressure before and after treatment.

Conclusion:showed that there is a decline in systolic and diastolic blood pressure response on the subject after being treated with banana (*Musa paradisiaca*)

Keywords: blood pressure, hypertension, pre-hypertension, banana, Musa paradisiaca, treatment

INTISARI

Latar Belakang : Prehipertensi adalah tingkat tekanan darah seseorang yang berada pada 80/90 atau 139/89.Berdasarkan *Journal Neurology* university of california, San Diego Scholl of Medicine bahwa orang yang memiliki tekanan darah cenderung tinggi atau prehipertensi memiliki resiko 55 persen lebih tinggi terserang stroke ketimbang dengan orang dengan tekanan darah normal.Penggunaan obat hipertensi modern dapat menimbulkan efek samping, sehingga obat tradisional bisa menjadi pilihan oleh masyarakat, yang salah satunya adalah Pisang Ambon (*Musa paradisiaca*) mengandung tinggi kalium, rendah natrium dan terdapat *Angiotensin Converting Enzyme Inhibitor* (ACE-I) sehingga baik untuk penderita prehipertensi.

Metode: Jenis penelitian ini adalah metode praeksperimental (*one group pretest and posttest design*) berjumlah 25 orang dan telah masuk terhadap kriteria eksklusi dan insklusi. hanya terdapat satu variabel saja yaitu respon tekanan darah selisih antara *posttest* dengan *pretest.* Analisis data menggunakan pengolahan data SPSS yaitu *paired sample t Teast* untuk data yang terdistribusi normal dan *Wilcoxon signed rank test* untuk data yang terdistribusi tidak normal.

Hasil: nilai sistolik *pretest-postest* dengan uji *Wilcoxon signed rank test* untuk *asymp. Sig (2-tailed) p* adalah 0,0001 (<0,05) sehingga H1 diterima, yang artinya ada perbedaan bermakna antara tekanan darah sistolik sebelum perlakuan dan sesudah perlakuan. Begitu pula dengan diastolik, nilai diastolik *pretest-postest* dengan uji *Wilcoxon signed rank test* untuk *asymp. Sig (2-tailed) p* adalah 0,0001 (<0,05), sehingga H1 diterima, yang artinya ada perbedaan bermakna antara tekanan darah diastolik sebelum perlakuan dan sesudah perlakuan.

Kesimpulan: terjadi penurunan respon tekanan darah sistolik dan diastolik pada subyek yang memakan Pisang Ambon (*Musa paradisiaca*)

Kata kunci: tekanan darah, hipertensi, pre-hipertensi, pisang, musa paradisiaca,obat