

## ABSTRAK

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### **PENGARUH SENAM KAKI DIABETES TERHADAP NILAI ANKLE BRACHIAL INDEX (ABI) PADA PASIEN DIABETES MELITUS TIPE II DI RSD K.R.M.T WONGSONEGORO SEMARANG**

**Latar Belakang:** Diabetes mellitus (DM) adalah penyakit metabolism yang ditandai dengan hiperglikemia karena kerusakan sekresi insulin atau kerja insulin yang terganggu. Hiperglikemia kronis pada DM dikaitkan dengan kerusakan, disfungsi, dan kegagalan beberapa organ, terutama saraf, jantung, mata, ginjal, dan pembuluh darah. Ulkusdiabetes adalah salah satu gangguan fisik yang dapat disebabkan oleh diabetes melitus.Ulkus diabetes terjadi ketika jaringan mati karena terbukanya pembuluh darah yang memberikan nutrisi kepada jaringan. Ulkus diabetes adalah komplikasi diabetes melitus yang disebabkan oleh emboli pembuluh darah besar yang merusak jaringan dan nekrosis di beberapa area tubuh, sehingga menghentikan pasokan darah.

**Metode:** Jenis kuantitatif, *Pra Experiment penelitian one group pre-posttest design without control*, Teknik purposive sampling sebanyak 40 sampel. Dengan Uji Wilcoxon Signed.

**Hasil:** Hasil *pre-test* pada penelitian menunjukkan sebagian besar responden mengalami tingkat nilai ankle brachial index dengan interpretasi oklusi sedang sebanyak 16 responden (40,0%) dan setelah dilakukan teknik senam kaki diabetes menunjukkan Sebagian besar responden mengalami peningkatan nilai ankle brachial index dengan interpretasi oklusi normal sebanyak 30 responden (75,0%). Hasil dari uji Wilcoxon didapatkan sebanyak 33 responden (17%) yaitu terdapat peningkatan dari pre test ke post test, dan 7 responden tidak mengalami peningkatan atau penurunan nilai ankle brachial index dimana nilai p value nya yaitu 0,000 (< 0,05) yang artinya Ha diterima dan H0 ditolak.

**Kesimpulan:** Ada pengaruh senam kaki diabetes terhadap nilai ankle brachial index pada pasien diabetes melitus tipe 2 di RSD K.R.M.T Wongsoegoro Semarang

**Kata Kunci:** Diabetes Melitus, Nilai Ankle Brachial Index, Senam Kaki Diabetes.  
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## **ABSTRACT**

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### **THE EFFECT OF DIABETES FOOT EXERCISES ON ANKLE BRACHIAL INDEX (ABI) VALUE IN TYPE II DIABETES MELLITUS PATIENTS AT RSD K.R.M.T WONGSONEGORO SEMARANG**

**Background:** Diabetes mellitus (DM) is a metabolic disease characterized by hyperglycemia due to impaired insulin secretion or impaired insulin action. Chronic hyperglycemia in DM is associated with damage, dysfunction and failure of several organs, especially the nerves, heart, eyes, kidneys and blood vessel. Diabetic ulcers are one of the physical disorders that can be caused by diabetes mellitus. Diabetic ulcers occur when tissue dies due to the opening of blood vessels that provide nutrition to the tissue. Diabetes ulcers are a complication of diabetes mellitus caused by large blood vessel embolism which damages tissue and necrosis in several areas of the body, resulting in cessation of blood supply.

**Method:** Quantitative type, pre-experimental research, one group pre-posttest design without control, purposive sampling technique with 40 samples. By Signed Wilcoxon Test.

**Results:** The results of the pre-test in the study showed that the majority of respondents experienced moderate levels of Ankle Brachial Index values with interpretation of occlusion as many as 16 respondents (40.0%) and after carrying out diabetic foot exercise techniques showed that the majority of respondents experienced an increase in Ankle Brachial Index values with interpretation. 30 respondents (75.0%) had normal occlusion. The results of the Wilcoxon test were obtained by 33 respondents (17%), namely that there was an increase from pre test to post test, and 7 respondents did not experience an increase or decrease in the brachial ankle index value where the p value was 0.000 ( $< 0.05$ ) which means Ha is accepted and H0 is rejected.

**Conclusion:** There is an influence of diabetic foot exercises on the brachial ankle index value in patients with type 2 diabetes mellitus at RSD K.R.M.T Wongsonegoro Semarang

**Keywords:** Ankle Brachial Index Value, Diabetes Foot Exercise, Diabetes  
**Bibliography:** (2019-202