THE EFFECT OF *FOOT SPA* THERAPY ON THE ANKLE BRACHIAL INDEX IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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ABSTRACK

Background: *Type 2 diabetes mellitus is often accompanied by peripheral circulatory disorders that increase the risk of vascular complications in the lower extremities. The Ankle Brachial Index (ABI) is an objective parameter used to assess peripheral perfusion. Non-pharmacological interventions such as foot spa therapy have the potential to improve peripheral blood circulation through thermal and mechanical effects.* ***Objective:*** *To analyze the effect of foot spa therapy on ABI values in patients with type 2 diabetes mellitus in the working area of Mulyorejo Public Health Center, Malang City.* ***Methods:*** *This study employed a quasi-experimental design with a pretest–posttest control group approach. A total of 68 respondents were selected using purposive sampling and divided into an intervention group and a control group, with 34 respondents in each group. ABI values were measured before and after the intervention. Data were analyzed using the Wilcoxon test to assess changes in ABI within each group and the Mann–Whitney test to compare ABI values between groups.* ***Results****: The Wilcoxon test showed a significant increase in ABI values in the intervention group after receiving foot spa therapy (mean pre-test 0.64; mean post-test 0.74; $p < 0.001$), whereas the control group showed no significant (mean pre-test 0.64; mean post-test 0.65; $p = 0.396$). The Mann–Whitney test demonstrated a significant difference in post-intervention ABI values between the intervention and control groups ($p < 0.001$).* ***Conclusion:*** *Foot spa therapy administered three times within one week at two-day intervals significantly improves Ankle Brachial Index values in patients with type 2 diabetes mellitus and can be recommended as a non-pharmacological nursing intervention to enhance peripheral perfusion.*

Keywords: *Foot spa, Ankle Brachial Index, Type 2 Diabetes Mellitus.*