THE EFFECT OF BUERGER ALLEN EXERCISE AND FOOT EXERCISE ON FOOT SENSORY STATUS OF TYPE 2 DIABETES MELLITUS PATIENTS AT NGUDI WALUYO WLINGI REGIONAL HOSPITAL

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ABSTRACT

Background: Diabetic peripheral neuropathy is a common complication of Type 2 Diabetes Mellitus that causes decreased sensory status of the feet and increases the risk of ulcers and amputation. Non-pharmacological interventions such as Buerger Allen Exercise (BAE) and Foot Exercise (FE) can improve peripheral circulation and sensory function. **Objective**: To analyze the effect of a combination of Buerger Allen exercise and foot exercise on the sensory status of the feet of patients with Type 2 Diabetes Mellitus. **Method**: Quasi-experimental research design with a two-group pre-test post-test design. The sample consisted of 36 research subjects divided into 2 groups, namely the intervention group and the control group. Measurement of foot sensory status scores was measured with a 10-g monofilament at 10 points. Data analysis used the Wilcoxon Test and Mann Whitney Test ($p < 0.05$). Results: The intervention group showed a significant increase in sensory status scores from an average of 7.11 to 9.11 ($p < 0.05$), while the control group did not experience significant changes ($p > 0.05$). There was a significant difference between the two groups after the intervention ($p < 0.05$). The proportion of respondents with low sensory risk increased from 61% to 94.4% in the intervention group. **Conclusion**: The combination of BAE and FE effectively improves the sensory status of the feet of patients with Type 2 DM. This combination works synergistically; BAE increases blood flow to the feet, while FE stimulates sensory nerves directly, thus together improving peripheral nerve function.

Keywords : Buerger Allen Exercise, Type 2 Diabetes Mellitus, Foot Exercise, Foot Sensory Status.