

THE EFFECT OF LEG GYMNASTICS ON ANKLE BRACHIAL INDEX TO PATIENTS DIABETES MELITUS TYPE 2 AT PUSKESMAS BANYUANYAR SURAKARTA

Eva Dwi Laksita Sari¹, Ika Silvitasari²

evadw9383@gmail.com

Faculty of Health Science

Aisyiyah Surakarta University

ABSTRACT

Background: Type 2 diabetes mellitus is a chronic disease in which the pancreas cannot produce enough insulin. The problem with type II diabetes that occurs a lot is the occurrence of vascular disorders which will result in diabetic ulcers. The occurrence of vascular disorders will affect the value of the ankle-brachial index (ABI). ABI is an examination of systolic pressure in the legs and arms to detect vascular disorders. Leg gymnastics is a physical exercise with alternate or simultaneous leg movements to improve blood circulation in the legs. **Objective:** To determine the effect of foot exercise on the ankle-brachial index in patients with type 2 diabetes at the Banyuanyar Health Center. **Methods:** Quantitative study, the methods used was pre-experiment with one group pre-test post-test design, the research sample used purposive sampling totaling 33 patients, and the research instrument used observation sheets, doppler, and sphygmomanometer. **Results:** Univariate analysis of ankle-brachial index value before the intervention was carried out at most (57.6%) of respondents had mild ABI values (0.8-8.9), and after the intervention, the most (72.7%) of respondents had normal ABI values (0.9-1.4). Bivariate analysis of the Wilcoxon test show that the ABI Pvalue = 0.000 < 0.05. **Conclusion:** There is an effect of leg exercise on the ankle-brachial index in type 2 diabetes mellitus patients at the Banyuanyar Health Center.

Keywords: Leg Gymnastics, Diabetes Melitus Type 2, Ankle Brachial Index