

## ***APPLICATION OF DIABETIC FOOT EXERCISES ON THE VALUE OF ANKLE BRACHIAL INDEX IN PATIENTS WITH TYPE 2 DIABETES MELLITUS IN THE WORKING AREA OF PUSKESMAS GAMPING II***

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### **ABSTRACT**

**Background:** Diabetes mellitus is a non-communicable disease characterized by increased blood glucose levels that exceed normal. The prevalence of diabetes has continued to increase over the past decade and ineffective diabetes management can lead to complications. Complications that can arise from diabetes mellitus are nerve damage (neuropathy), leg amputation and can even be life threatening. To avoid complications, there are non-pharmacological treatments such as diabetic foot exercises. Diabetic foot exercise is one of the options to prevent complications because it is affordable and easy to do.

**Objective:** This case study was conducted to determine the application of diabetic foot exercises to the ankle brachial index value in patients with type 2 diabetes mellitus.

**Methods:** The research method used in the preparation of this scientific paper is descriptive case study research. The subjects of this case study were two patients with type 2 diabetes mellitus. This study was conducted 6 times in 2 weeks for 15-30 minutes.

**Results:** After the application of diabetic foot exercises 6 times in 2 weeks, it was found that there was an increase in the average value of the ankle brachial index in two respondents from 0.87 to 1.24.

**Conclusion:** The application of diabetic foot exercises in patients with diabetes mellitus is effective for increasing the value of the ankle brachial index.

**Keywords:** diabetes mellitus, foot exercises, ankle brachial index

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## **PENERAPAN SENAM KAKI DIABETES TERHADAP NILAI ANKLE BRACHIAL INDEX PADA PASIEN DIABETES MELITUS TIPE 2 DI WILAYAH KERJA PUSKESMAS GAMPING II**

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### **ABSTRAK**

**Latar Belakang:** Diabetes melitus merupakan salah satu penyakit tidak menular yang ditandai dengan peningkatan kadar glukosa darah yang melebihi normal. Prevelensi diabetes terus meningkat selama dekade terakhir dan penanganan diabetes yang tidak efektif dapat menyebabkan komplikasi. Komplikasi yang dapat ditimbulkan dari penyakit diabetes melitus yaitu kerusakan syaraf (neuropati), amputasi kaki bahkan dapat mengancam nyawa. Untuk menghindari komplikasi terdapat penanganan secara non farmakologis seperti senam kaki diabetes. Senam kaki diabetes menjadi salah satu pilihan untuk mencegah komplikasi karena biaya yang terjangkau dan mudah dilakukan.

**Tujuan:** Studi kasus ini dilakukan untuk mengetahui penerapan senam kaki diabetes terhadap nilai *ankle brachial index* pada pasien diabetes melitus tipe 2.

**Metode:** Metode penelitian yang digunakan dalam penyusunan karya tulis ilmiah ini merupakan penelitian deskriptif studi kasus. Subjek studi kasus ini adalah dua pasien diabetes melitus tipe 2. Penelitian ini dilakukan 3 kali dalam seminggu selama 2 minggu.

**Hasil:** Setelah dilakukan penerapan senam kaki diabetes sebanyak 6 kali dalam 2 minggu didapatkan hasil adanya peningkatan rerata nilai *ankle brachial index* pada dua responden dari 0,87 menjadi 1,24.

**Kesimpulan:** Penerapan senam kaki diabetes pada pasien diabetes melitus efektif untuk meningkatkan nilai *ankle brachial index*.

**Kata Kunci:** diabetes melitus, senam kaki, *ankle brachial index*

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