

**PENGARUH *FOOT REFLECTION BOARD* TERHADAP PENURUNAN  
NEUROPATI PERIFER PADA PENYANDANG DIABETES MELLITUS  
DI PUSKESMAS DEPOK 3**

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**ABSTRAK**

**Latar Belakang :** Neuropati paling sering terjadi pada penyandang diabetes mellitus dengan prevalensi 60-70%. Penurunan persepsi nyeri pada neuropati perifer dapat menyebabkan penyandang diabetes mellitus mengalami ulkus diabetikum tanpa disadari. Terapi komplementer yang dapat dilakukan untuk mengontrol terjadinya neuropati dan perbaikan sirkulasi ke kaki adalah terapi akupresur. Akupresur yang dilakukan pada beberapa titik akupresur di kaki dapat meningkatkan aliran darah ke kaki. Stimulasi yang dilakukan untuk menurunkan gejala neuropati.

**Tujuan Penelitian :** Diketuainya pengaruh penggunaan alat *foot reflection board* terhadap penurunan neuropati perifer pada penyandang diabetes mellitus.

**Metode Penelitian :** Desain penelitian *Quasi Experiment* dengan *Non-equivalent Control Grup Design*. Sampel penelitian berjumlah 60 responden dengan masing-masing kelompok 30 responden. Pengambilan sampel dengan *purposive sampling*. Teknik pengumpulan data dengan wawancara, dokumentasi rekam medis dan pemeriksaan menggunakan *Seems-Weinstein Monofilament Test (SWMT)* 10g. Kelompok eksperimen diberikan intervensi menggunakan *foot reflection board* 3x seminggu selama 4 minggu dan kelompok kontrol diberikan perlakuan senam kaki diabetes sebanyak 1x. Uji yang digunakan yaitu uji *Wilcoxon* dan uji *Mann Whitney*.

**Hasil Penelitian :** Didapatkan data *pre test* pengukuran neuropati perifer kelompok intervensi dan kelompok kontrol sebanyak 30 responden (100%) mengalami penurunan sensitivitas. Setelah diberikan perlakuan *foot reflection board* lebih dari sebagian mengalami perbaikan menjadi normal, sedangkan pada kelompok yang diberikan senam kaki diabetes mellitus 2 responden mengalami perbaikan neuropati perifer menjadi normal namun hampir seluruh responden tetap mengalami penurunan sensitivitas. Hasil analisa data menggunakan uji *Wilcoxon* dengan hasil ada perbedaan yang signifikan dengan  $p = 0,000$  ( $p < 0,05$ ) dan hasil analisa dengan uji *Mann Whitney* ada pengaruh yang bermakna dengan  $p = 0,000$  ( $p < 0,05$ )

**Kesimpulan :** Ada pengaruh *foot reflection board* terhadap penurunan neuropati perifer pada penyandang diabetes mellitus

**Kata Kunci :** Akupresur, Diabetes Mellitus, *Foot Reflection Board*, Neuropati Perifer

**THE EFFECT OF FOOT REFLECTION BOARD ON REDUCING  
PERIPHERAL NEUROPATHY IN PATIENTS WITH DIABETES  
MELLITUS AT DEPOK 3 HEALTH CENTER**

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**ABSTRACT**

**Background:** Neuropathy most often occurs in people with diabetes mellitus with a prevalence of 60-70%. Decreased pain perception in peripheral neuropathy can cause people with diabetes mellitus to develop diabetic ulcers unknowingly. Complementary therapy that can be done to control the occurrence of neuropathy and improve circulation to the feet is acupressure therapy. Acupressure done at several acupressure points on the feet can increase blood flow to the feet. Stimulation is done to reduce the symptoms of neuropathy.

**Research Objective:** To determine the effect of using a foot reflection board on the reduction of peripheral neuropathy in patients with diabetes mellitus.

**Research Method:** Quasi Experiment research design with Non-equivalent Control Group Design. The research sample consisted of 60 respondents with 30 respondents in each group. Sampling by purposive sampling. Data collection techniques were interviews, medical record documentation and examinations using the Seems-Weinstein Monofilament Test (SWMT) 10g. The experimental group was given intervention using a foot reflection board 3x a week for 4 weeks and the control group was given 1x diabetic foot exercise. The tests used are the Wilcoxon test and the Mann Whitney test.

**Research Results:** Obtained data from the pre-test measurement of peripheral neuropathy in the intervention group and the control group as many as 30 respondents (100%) experienced a decrease in sensitivity. After being given the foot reflection board treatment, more than half experienced improvement to normal, whereas in the group given diabetes mellitus foot exercises 2 respondents experienced improvement in peripheral neuropathy to normal but almost all respondents still experienced a decrease in sensitivity. The results of data analysis using the Wilcoxon test with the result that there is a significant difference with  $p = 0.000$  ( $p < 0.05$ ) and the results of analysis with the Mann Whitney test there is a significant effect with  $p = 0.000$  ( $p < 0.05$ )

**Conclusion:** There is an effect of foot reflection board on the decrease in peripheral neuropathy in patients with diabetes mellitus

**Keywords :** Acupressure, Diabetes Mellitus, Foot Reflection Board, Peripheral Neuropathy