Penggunaan ERLESS 30° dan 45° terhadap *Circumference Edema*, Kenyamanan dan Fungsi pada Ulkus Kaki Diabetes di Rumah Sakit Samarinda

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ABSTRAK

Latar Belakang: Edema pada Ulkus Kaki Diabetes (UKD) terjadi karena kegagalan *venous return.* Sudut elevasi ekstremitas bawah berpengaruh besar terhadap *venous return.* ERLESS (*Edema Reduction Leg Elevator Stainless Steel)* didesain sebagai *elevator* yang mempertimbangkan akurasi sudut dan kenyamanan. Tujuan penelitian menganalisis pengaruh elevasi ekstremitas bawah sudut 30° dan 45° menggunakan ERLESS terhadap *circumference edema,* kenyamanan dan fungsi ERLESS pada klien UKD.

Metode: *Quasy eksperiment,* pendekatan *pre post test control group design,* Sampel responden 42 klien dan 28 perawat. Teknik sampel menggunakan *consecutive sampling.* Responden perawat memasang ERLESS pada kelompok perlakuan elevasi 30° dan 45° kelompok kontrol dengan bantal. Elevasi selama 30 menit. Sebelum dan Sesudah elevasi semua kelompok diukur *circumference edema.* Kelompok perlakuan klien mengisi kuesioner kenyamanan ERLESS dan perawat mengisi kuesioner Fungsi ERLESS. Uji statistik *paired t-test, One Way Anova* dan *One Sample t-test dan Regresi linear berganda.*

Hasil: *Circumference edema* kelompok 30°, 45° dan kontrol nilai p=0.001. Selisih *circumference edema* kelompok 30° dengan kontrol, 30° dengan 45°, 45° dengan kontrol masing-masing nilai p=0.035, p=0.639, p=0.011. Kenyamanan ERLESS kelompok 30° dan 45° nilai p=0.005, p=0.023. Fungsi ERLESS p=0.001.

Kesimpulan: Elevasi 30° dan 45° efektif menurunkan *circumference edema*. ERLESS 30° lebih nyaman dibandingkan 45°. ERLESS berfungsi menurunkan edema dan kenyamanan. Melakukan penelitian ERLESS dengan sudut berbeda.

Kata Kunci: Elevasi ekstremitas bawah, *circumference edema,* Kenyamanan, Fungsi ERLESS, Ulkus Kaki Diabetes.

The use ERLESS 30 degrees and 45 degrees of Circumference Edema, Comfort and Function ERLESS with Diabetes Foot Ulcers in Hospitals Samarinda

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ABSTRACT

***Background**: Edema of the DFUs (Diabetic Foot Ulcers) occur due to the failure of venous return. The angle of lower extremity elevation highly influence the venous return. ERLESS (Edema Reduction Leg Elevator Stainless Steel) is designed by the researchers as elevator that take into account the accuracy of angle and comfort. The aim of this research is to analyze the effect of lower extremity elevation for the angle of 30^o and 45° by using ERLESS towards the edema circumference, comfort and function of ERLESS on the DFUs client.*

***Methods**: The method of this research is quasy experiment with approach pre and posttest control group design. The sample of respondents are 42 clients and 28 nurses. The sampling technique uses consecutive sampling. The nurse respondents put ERLESS in the treatment group of 30^o and 45° elevation control group with a pillow. The elevation is for 30 minutes. Then, all of the groups, the edema circumference is measured. The client treatment group fills out the ERLESS questionnaire and the nurse fills out the ERLESS function questionnaire. The statistical test is by using paired t-test, One Way Anova and One Sample t-test and Multiple linear regression.*

***Results**: Edema circumference group of 30° and 45^o and control is with the value of p=0.001. The difference between edema circumference with the group of 30° with control, 30° with 45°, 45° with control with each value of p=0.035, p=0.639, and p=0.011. The comfort of ERLESS groups of 30^o and 45° with the value of p=0.005 and p=0.023. The function of ERLESS is with p=0.001.*

***Conclusion**: The elevation of 30° and 45^o is effectively lowering the edema circumference. ERLESS with 30^o is more comfortable than with 45°. ERLESS has the function of lowering edema and comfort. It is suggested to conduct a research by using ERLESS with different angles.*

Keywords: Lower Extremity Elevation, Edema Circumference, Comfort, ERLESS Function, Diabetic Foot Ulcers.