

**PROGRAM STUDI KEPERAWATAN**  
**FAKULTAS ILMU KEPERAWATAN**  
**UNIVERSITAS ISLAM SULTAN AGUNG**  
**Skripsi, Januari 2021**

**ABSTRAK**

Yusuf Rifki Himawan

“PENGARUH SUDUT DAN TEKANAN IRIGASI LUKA TERHADAP UKURAN LUAS & KEDALAMAN LUKA PASIEN ULKUS DIABETIKUM DI RUMAH SAKIT ISLAM SULTAN AGUNG SEMARANG”

62 Halaman + 9 Tabel + 10 Lampiran

**Latar Belakang :** Ulkus kaki diabetik disebabkan beberapa faktor diantaranya: *neuropathy*, *iskemia* dan *infeksi*, kelainan neuropathy akan mengakibatkan perubahan jaringan-jaringan syaraf di sebabkan adanya timbunan fruktosa dengan sorbitol sehingga terjadinya akson yang menghilang, kecepatan induksi yang menurun, kesemutan, pergerakan otot jadi turun, penurunan otot, berkeringat secara lebih, lapisan kulit mengering dan hilangnya rasa, apabila klien dengan Diabetik tidak berhati-hati akan mengakibatkan trauma yang dapat menimbulkan jaringan yang abnormal dan menjadi ulkus kaki diabetik. Tujuan dari penelitian ini untuk mengetahui pengaruh tekanan dan sudut irigasi terhadap luas & kedalaman luka ulkus diabetikum di RSI Sultan Agung Semarang.

**Metode :** Jenis penelitian ini *Pre –Eksperimental* dengan rancangan *one grup pre-post test* Sample penelitian ini berjumlah sebanyak 6 responden dengan menggunakan teknik *Purposive Sampling*. Data yang diperoleh diolah secara statistic menggunakan *Uji Paired T-Test*

**Hasil :** Berdasarkan hasil analisa diperoleh bahwa dari 6 responden sebagian besar memiliki karakteristik usia 54 tahun berjumlah 4 Responden (66,7%). Jenis kelamin sebagian besar berjenis kelamin perempuan berjumlah 5 Responden (83,3%). Lama menderita di dapatkan hasil  $<5$  Tahun sebanyak 3 responden (50,0%) dan  $>5$  Tahun sebanyak 3 Responden (50,0%). Serta jumlah rata-rata Luas & Kedalaman luka sebelum irigasi, luas (8,33)cfu/ml Kedalaman (2,83)cfu/ml dan jumlah rata-rata sesudah irigasi, luas (7,17)cfu/ml dan untuk kedalaman (2,33)cfu/ml.

**Simpulan** ; Terdapat pengaruh sudut dan tekanan irigasi terhadap luas & kedalaman luka pada ulkus diabetikum dengan *p value* luas sebelum irigasi (0,370) sesudah irigasi (0,377) Dan kedalaman sebelum irigasi (0,212) sesudah irigasi (0,473).

**Kata Kunci** : Tekanan dan Sudut Irigasi, luas dan kedalaman luka. Ulkus Diabetikum.

**Daftar Pustaka** : 25 (2014-2020).



NURSING STUDY PROGRAM  
FACULTY OF NURSING SCIENCE  
ISLAMIC UNIVERSITY OF SULTAN AGUNG

Thesis, January 2021

**ABSTRACT**

Yusuf Rifki Himawan

“THE INFLUENCE OF ANGLE AND WOUND IRRIGATION PRESSURE ON THE SIZE & DEPTH OF DIABETIC ULKUS DIABETIC WOUNDS AT SULTAN AGUNG ISLAMIC HOSPITAL, SEMARANG”

62 Pages + 9 Tables + 10 Attachments

**Background :** Diabetic foot ulcers are caused by several factors including: neuropathy, ischemia and infection, neuropathy disorders will result in changes in nerve tissue caused by the accumulation of fructose with sorbitol resulting in loss of axons, decreased induction speed, tingling, decreased muscle movement, decreased muscle, excessive sweating, dry skin layers and loss of feeling, if the client with Diabetic is not careful it will result in trauma which can cause abnormal tissue and become diabetic foot ulcers. The purpose of this study was to determine the effect of pressure and angle of irrigation on the breadth & depth of diabetic ulcer wounds at RSI Sultan Agung Semarang.

**Methods :** This type of research is pre-experimental with a one group design pre-post test. The sample of this research was 6 respondents using purposive sampling technique. The data obtained were processed statistically using the Paired T-Test

**Results :** Based on the results of the analysis, it was found that of the 6 respondents, most of them had a characteristic age of 54 years, amounting to 4 respondents (66.7%). Most of the sexes are female, amounting to 5 respondents (83.3%). Long suffering results obtained <5 years as many as 3 respondents (50.0%) and > 5 years as many as 3 respondents (50.0%). As well as the average number of wounds area & depth before irrigation, area (8.33) cfu / ml Depth (2.83) cfu / ml and the average number after irrigation, area (7.17) cfu / ml and for depth (2.33) cfu / ml.

**Conclusion :** There is an effect of the angle and pressure of irrigation on the extent & depth of wounds in diabetic ulcers with *p value* of area before irrigation (0.370) after irrigation (0.377) and depth before irrigation (0.212) after irrigation (0.473)

Keywords : Pressure and Irrigation Angle, extent and depth of cuts. Diabetic ulcer.

Bibliography : 25 (2014-2020)