

ABSTRAK

Literature Review: Pengaruh Vibration terhadap Penyembuhan Luka Ulkus Kaki Diabetik

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Latar belakang: Diabetes melitus adalah penyakit metabolik yang dapat menyebabkan gangguan vaskuler. Penderita diabetes melitus berisiko terhadap ulkus kaki diabetik karena sirkulasi darah kaki kurang baik, indera rasa kedua kaki berkurang sehingga kaki mudah terluka, dan daya tahan tubuh terhadap infeksi menurun. Biasanya ulkus kaki disebabkan oleh tekanan berulang (geser dan tekanan) pada kaki. Salah satu intervensi keperawatan yang dapat diberikan untuk mempercepat penyembuhan luka pada ulkus kaki diabetik untuk mencegah morbiditas adalah terapi *vibration*.

Tujuan: Menganalisis dan menilai kualitas artikel tentang pengaruh *vibration* terhadap perbaikan luka ulkus kaki diabetik.

Metode: Penelitian ini menggunakan desain *literature review*. Pencarian artikel diperoleh dari database BioMed Central, Google Scholar, Portal Garuda, PubMed, ScienceDirect, Springer, dan Taylor & Francis. Seleksi artikel mengikuti alur PRISMA dan penilaian kualitas artikel dilakukan oleh penulis dengan instrumen *Joanna Briggs Institute*.

Hasil: Berdasarkan hasil penelusuran literatur, 6 dari 1827 artikel memenuhi kriteria untuk dianalisis dan memiliki kualitas baik yang dipublikasikan pada tahun 2013-2023. Hasil analisis menunjukkan bahwa terapi *vibration* berpengaruh terhadap perbaikan luka ulkus kaki diabetik.

Kesimpulan: Terapi *vibration* baik dilakukan dengan frekuensi dibawah 50 Hz (frekuensi rendah) dengan durasi pemberian intervensi rata-rata adalah sekitar 15 menit – 20 menit dan dilakukan 5 hari/minggu.

Kata Kunci: Diabetes; Penyembuhan Luka; Ulkus kaki; Vibrasi.

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ABSTRACT

Literature Review: Effect of Vibration on Wound Healing of Diabetic Foot Ulcer

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Background: Diabetes melitus is a metabolic disease that can cause vascular disorders. People with diabetes mellitus are at risk for diabetic foot ulcers because the blood circulation in the legs is poor, the sense of feeling for both feet is reduced so that the feet are easily injured, the body's resistance to infection decreases. Diabetic foot ulcers usually caused by repeated pressure (shear and pressure) on the foot. One of the nursing interventions that can be given to accelerate wound healing in diabetic foot ulcers to prevent morbidity is vibration therapy.

Objective: To analyze and assess the quality of articles about the effect of about the effect of vibration on the repair of diabetic foot ulcers.

Methods: This study used a literature review design. The search strategy was performed in BioMed Central, Google Scholar, Portal Garuda, PubMed, ScienceDirect, Springer, and Taylor & Francis. The selection of articles followed the PRISMA and assessment of the quality of the studies was carried out by the authors using the Joanna Briggs Institute instrument.

Results: A total of 1827 studies were registered and 6 studies were selected with good quality criteria published in 2013-2023. The results of the analysis showed that most of the results showed that vibration therapy has an effect on the improvement of diabetic foot ulcers.

Conclusion: Vibration therapy is best done with a frequency below 50 Hz (low frequency) with an average duration of intervention of around 15 – 20 minutes and is carried out 5 days/week.

Keywords: Diabetic, Foot Ulcer, Vibration, Wound Healing.

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