PENGARUH BANTAL MIRING KANAN KIRI DENGAN ALARM "BAMIRIKAL" TERHADAP PENURUNAN RISIKO LUKA DEKUBITUS PASIEN IMOBILISASI DI RUANG ICU RSUD AJIBARANG

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ABSTRAK

Latar Belakang: Luka dekubitus sering terjadi sebagai komplikasi yang umum pada pasien imobilisasi yang dirawat di ruang ICU. Salah satu cara untuk mencegah luka dekubitus adalah perubahan posisi miring pasien. Kepatuhan terhadap protokol perubahan posisi pasien masih rendah, sehingga diperlukan alat bantu *Bamirikal*, bantal miring kanan-kiri dengan alarm, untuk meningkatkan efisiensi pencegahan luka dekubitus.

Metode: Penelitian ini diawali membuat alat *Bamirikal* melalui *Research and Development (RnD)* dengan model *Prototype.* Efektifitas penggunaan alat ini diteliti dengan desain *true-experimental* pendekatan *randomized control group pretest-posttest design*. Subjek penelitian adalah pasien imobilisasi di ruang ICU RSUD Ajibarang yang dibagi menjadi kelompok intervensi dan kontrol. Kelompok intervensi menggunakan bantal *Bamirikal*, sedangkan kelompok kontrol menjalani protokol perubahan posisi standar. Risiko luka dekubitus diukur menggunakan Skala Braden dan Lembar Observasi *PUSH* sebelum dan setelah intervensi selama empat hari berturut-turut.

Hasil: *Prototype Bamirikal* telah memenuhi uji *expert*, uji validitas, uji realibilitas alat dan uji *USE* dengan nilai *I-CVI* = 1,00 (valid), *Intraclass Correlation Coefficient* (*ICC*)= 0,805 (baik) dan skor uji *USE* = 95,2% (layak). *Bamirikal* terbukti dapat menurunkan risiko luka dekubitus secara signifikan pada kelompok intervensi dibandingkan kelompok kontrol dengan $p < 0,0125$ (koreksi Bonferroni). Rata-rata skor Skala Braden meningkat lebih signifikan pada kelompok intervensi, menunjukkan efektivitas *Bamirikal* dalam menurunkan risiko luka dekubitus.

Kesimpulan: *Prototype* bantal *Bamirikal* terbukti memiliki kualitas yang valid, baik dan layak digunakan. Penggunaan bantal *Bamirikal* efektif dalam menurunkan risiko luka dekubitus pada pasien imobilisasi di ruang ICU RSUD Ajibarang.

Kata Kunci: Luka dekubitus, imobilisasi, *Bamirikal*, Skala Braden, ICU.

THE EFFECT OF THE RIGHT-LEFT TILTING PILLOW WITH AN ALARM ("BAMIRIKAL") ON REDUCING THE RISK OF PRESSURE ULCERS IN IMMOBILIZED PATIENTS IN THE ICU AT RSUD AJIBARANG

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ABSTRACT

Background: Pressure ulcers are a common complication among immobilized patients in the Intensive Care Unit (ICU). One of the key strategies to prevent pressure ulcers is lateral repositioning of patients. However, adherence to patient repositioning protocols remains low, necessitating the development of Bamirikal, a right-left tilting pillow with an integrated alarm system, to enhance the efficiency of pressure ulcer prevention.

Methods: This study began with the development of the Bamirikal device through a Research and Development (RnD) approach using a prototype model. The effectiveness of this device was evaluated using a true-experimental design with a randomized control group pretest-posttest approach. The study subjects consisted of immobilized patients in the ICU of RSUD Ajibarang, divided into intervention and control groups. The intervention group utilized the Bamirikal pillow, while the control group followed the standard repositioning protocol. The risk of pressure ulcers was assessed using the Braden Scale and PUSH Observation Sheet before and after the intervention over four consecutive days.

Results: The Bamirikal prototype successfully passed expert validation, instrument validity testing, reliability testing, and usability evaluation, with an I-CVI score of 1.00 (valid), an Intraclass Correlation Coefficient (ICC) of 0.805 (good), and a USE test score of 95.2% (acceptable). The Bamirikal device significantly reduced the risk of pressure ulcers in the intervention group compared to the control group $p < 0.0125$ (Bonferroni correction). Additionally, the average Braden Scale score increased significantly in the intervention group, further demonstrating the effectiveness of Bamirikal in reducing the risk of pressure ulcers.

Conclusion: The Bamirikal pillow prototype has been proven to be valid, high-quality, and suitable for use. The use of the Bamirikal pillow is effective in reducing the risk of pressure ulcers among immobilized patients in the ICU of RSUD Ajibarang.

Keywords: Pressure ulcers, immobilization, Bamirikal, Braden Scale, ICU.