

ABSTRAK

Pengaruh *Constraint Induced Movement Therapy* Terhadap Kekuatan Otot Pada Pasien Stroke Non Hemoragik di Rumah Sakit Umum Daerah Bali Mandara Provinsi Bali

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Introduction: Stroke non hemoragik sering menyebabkan kelemahan ekstremitas atas yang mengakibatkan penurunan kemampuan fungsional pasien. *Constraint Induced Movement Therapy* (CIMT) merupakan metode rehabilitasi berbasis neuroplastisitas yang membatasi penggunaan ekstremitas sehat untuk merangsang penggunaan ekstremitas paretik. Penelitian ini bertujuan menganalisis pengaruh CIMT terhadap kekuatan otot pasien stroke non hemoragik. **Methods:** Desain penelitian ini *Quasy Experiment* dengan rancangan *Non-Equivalent Control Group Pretest-Posttest*. Sampel berjumlah 34 responden (17 kelompok perlakuan, 17 kelompok kontrol) di RSUD Bali Mandara Provinsi Bali. Kekuatan otot diukur menggunakan Manual Muscle Testing sebelum dan sesudah intervensi, dianalisis menggunakan uji *Paired t-test* dan *Independent t-test*. **Results:** Kekuatan otot kelompok perlakuan meningkat rata-rata 1,588 (dari 2,47 menjadi 4,06), sedangkan kelompok kontrol meningkat 0,529 (dari 2,65 menjadi 3,18). **Analysis:** Hasil uji *paired t-test* menunjukkan terdapat peningkatan kekuatan otot yang signifikan pada kelompok perlakuan ($p=0,000$) dan kelompok kontrol ($p=0,001$). Uji *independent t-test* menunjukkan bahwa kelompok perlakuan yang diberikan CIMT mengalami peningkatan kekuatan otot yang secara signifikan lebih besar dibandingkan kelompok kontrol ($p=0,000$) sehingga terdapat pengaruh signifikan CIMT terhadap peningkatan kekuatan otot pasien stroke non hemoragik di RSUD Bali Mandara Provinsi Bali. **Discussion:** *Constraint Induced Movement Therapy* berpengaruh signifikan terhadap peningkatan kekuatan otot pasien stroke non hemoragik sehingga dapat direkomendasikan sebagai intervensi keperawatan rehabilitatif di ruang rawat inap.

Kata Kunci: CIMT, Kekuatan Otot, Stroke Non Hemoragik

ABSTRACT

The Effect of Constraint Induced Movement Therapy on Muscle Strength in Non-Hemorrhagic Stroke Patients at Bali Mandara Regional General Hospital, Bali Province

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Introduction: Non-hemorrhagic stroke frequently causes upper extremity weakness, resulting in decreased functional ability. Constraint-Induced Movement Therapy (CIMT) is a neuroplasticity-based rehabilitation approach that restricts the use of the unaffected upper extremity to encourage the use of the paretic limb. This study aimed to analyze the effect of Constraint-Induced Movement Therapy on muscle strength in patients with non-hemorrhagic stroke. **Methods:** This study employed a quasi-experimental design using a non-equivalent control group pretest-posttest approach. A total of 34 respondents participated in the study, consisting of 17 participants in the intervention group and 17 in the control group, recruited from Bali Mandara Regional General Hospital, Bali Province. Muscle strength was assessed using the Manual Muscle Testing (MMT) scale before and after the intervention. Data were analyzed using the paired *t*-test and independent *t*-test. **Results:** The intervention group demonstrated a mean increase in muscle strength of 1.588 points (from 2.47 to 4.06), whereas the control group showed a mean increase of 0.529 points (from 2.65 to 3.18). **Analysis:** The paired *t*-test revealed a significant improvement in muscle strength in both the intervention group ($p = 0.000$) and the control group ($p = 0.001$). The independent *t*-test showed that the improvement in muscle strength was significantly greater in the intervention group receiving CIMT than in the control group ($p = 0.000$), indicating that Constraint-Induced Movement Therapy had a significant effect on improving muscle strength in patients with non-hemorrhagic stroke at Bali Mandara Regional General Hospital, Bali Province. **Discussion:** Constraint-Induced Movement Therapy significantly improves muscle strength in patients with non-hemorrhagic stroke. Therefore, CIMT is recommended as a rehabilitative nursing intervention for patients receiving inpatient care.

Keywords: *CIMT, Muscle Strength, Non-Hemorrhagic Stroke*