PENATALAKSANAAN FISIOTERAPI PADA KASUS *DOWN SYNDROME* DI RSAB HARAPAN KITA

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Abstrak

Latar Belakang: *Down Syndrome* adalah penyakit yang disebabkan karena adanya kesalahan pembelahan sel (umumnya pada kromosom 21) yang yang menghasilkan tiga kromosom 21 sehingga terbentuk 47 kromosom, lebih 1 kromosom dari manusia yang umumnya memiliki 46 kromosom. Menurut WHO, *down syndrome* sekitar 3.000-5.000 kelahiran dengan 1 kejadian per 1.000-1.100 kelahiran di seluruh dunia. **Tujuan:** Untuk mengetahui pelaksanaan fisioterapi pada kasus *down syndrome* dengan menggunakan *Neurodevelopmental treatment* (NDT), latihan *core stability*, sensori dan *tilting table*. **Metode:** Penelitian ini menggunakan metode laporan studi kasus dengan memberikan gambaran yang jelas pada pasien *down syndrome* dengan termasuk data pasien seperti identitas, anamnesa, pemeriksaan, intervensi dan evaluasi sebanyak 4 kali. **Hasil:** Setelah dilakukan 4 kali tindakan fisioterapi terdapat peningkatan LGS *hip* dan *knee* 1-2 derajat dan skor GMFM dari 22,48% menjadi 23,48%. *Head* dan *trunk control* lebih stabil dan kekuatan otot *core stability* mengalami perubahan perlahan ke arah normal. **Kesimpulan**: Pasien dengan kondisi *down syndrome* dilakukan pemeriksaan *Gross Motor Functional Measurement* (GMFM) untuk pemeriksaan motorik fungsional anak, pemeriksaan sensori, refleks primitif, pemeriksaan *joint laxity* dengan Lingkup Gerak Sendi (LGS). Intervensi Fisioterapi NDT, Latihan *core stability*, sensori dan *tilting table* memberikan manfaat baik kepada pasien *down syndrome*.

Kata Kunci: Fisioterapi *Down Syndrome*, *Neurodevelopmental treatment* (NDT), latihan *core stability*, sensori dan *tilting table*

PHYSIOTHERAPY MANAGEMENT IN DOWN SYNDROME CASE AT RSAB HARAPAN KITA

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Abstract

Background: Down Syndrome is a genetic disorder caused by an error in cell division, typically involving chromosome 21, resulting in trisomy 21. This is leads to the presence of 47 chromosomes instead of the typical 46. According to the World health Organization (WHO), down syndrome occurs in approximately 3.000-5.000 births annually, with every an incidence rate is 1 to 1.000 to 1.100 lives births worldwide. **Objective:** This study aims to describe the physiotherapy intervensions applied in down syndrome case using Neurodevelopmental Treatment (NDT), core stability exercise, sensory, and tilting table therapy. **Method:** This study used a case report approach providing a detailed overview patient in down syndrome including patient identification, medical history, assesments, intervention and evaluation along 4 physiotherapy sessions. **Result:** After 4 sessions therapy, improvements were observed in hip and knee ROM by 1-2 degrees and the gross motor function measurement (GMFM) scores increased from 22,48% to 23,48%. Head and trunk control became more stable and core muscle stability showed gradual improvement towards normal level. **Conclusion:** In patient down syndrome assesments included the Gross Motor Function Measurement (GMFM) to evaluate the functional motor abilities in children, sensory examination, primitive reflex assesment and joint laxity evaluation using Range Of Motion (ROM) measurement. Physiotherapy interventions involving Neurodevelopmental Treatment (NDT), core stability exercises, sensory treatment and tilting table therapy provided beneficial outcomes for patient in down syndrome.

Keywords: Down Syndrome Physiotherapy, Neurodevelopmental Treatment (NDT), Core Stability Exercise, Sensory, Tilting Table.