

PENATALAKSANAAN FISIOTERAPI PADA KASUS *DOWN SYNDROME* DI RS PMI BOGOR

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Abstrak

Latar Belakang: Hambatan perkembangan motorik pada anak *down syndrome* (DS) menyebabkan kemampuan gerak dasar yaitu seperti mengangkat kepala, duduk, merangkak, dan berdiri belum dapat dicapai dengan baik. Adanya hipotonia dan *joint laxity* membuat stabilitas tubuh serta kontrol postur anak menjadi kurang optimal sehingga perkembangan motorik kasar dan halus pada anak *down syndrome* mengalami keterlambatan. Pemberian intervensi fisioterapi dengan metode *neuro developmental treatment* (NDT) dilakukan untuk membantu meningkatkan kontrol postur dan kemampuan gerak anak. **Tujuan:** Penelitian ini dilaksanakan dengan tujuan untuk mengetahui penatalaksanaan fisioterapi pada kasus *down syndrome* di RS PMI Bogor. **Metode:** Penelitian ini menggunakan desain studi kasus dengan pendekatan deskriptif analitik untuk mengevaluasi efektivitas intervensi fisioterapi. Subjek penelitian adalah seorang anak dengan kondisi *down syndrome* berusia 8 bulan 21 hari. Parameter keberhasilan diukur menggunakan instrumen standar yang komprehensif, meliputi inspeksi statis, inspeksi dinamis, palpasi, *XOTR Scale*, Pemeriksaan pola gerak, *Sensory Profile*, *Gross Motor Function Measure* (GMFM), serta evaluasi refleks primitif. Data yang diperoleh dianalisis untuk menggambarkan perkembangan kemampuan motorik dan tingkat kemandirian fungsional pasien. **Hasil:** Setelah 3 kali hasil evaluasi terdapat peningkatan pada *Gross Motor Function Measure* (GMFM), *XOTR Scale*, *Joint laxity*, serta refleks primitif dan tidak ditemukan adanya perubahan pada pemeriksaan sensory. **Kesimpulan:** Anak dengan *down syndrome* mengalami gangguan seperti hipotonia, *joint laxity*, dan keterlambatan perkembangan motorik yang menyebabkan kontrol postural dan kemampuan motorik kasar belum optimal. Penatalaksanaan fisioterapi menggunakan pendekatan *neuro developmental treatment* melalui stimulasi sensorimotor, latihan *weight bearing*, serta latihan posisi bertujuan meningkatkan stabilitas tubuh, kontrol postural, dan kemampuan motorik dasar anak secara bertahap.

Kata Kunci: Fisioterapi, *Down syndrome*, GMFM, *XOTR scale*, *Sensory Profile*, *Refleks primitive*, NDT (*Neuro Development Treatment*).

PHYSIOTHERAPY MANAGEMENT IN DOWN SYNDROME CASES AT PMI BOGOR HOSPITAL

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Abstract

Background: Delays in motor development in children with Down syndrome (DS) cause basic motor abilities such as head control, sitting, crawling, and standing to be difficult to achieve optimally. The presence of hypotonia and joint laxity reduces body stability and postural control, resulting in delayed gross and fine motor development in children with Down syndrome. Physiotherapy intervention using the Neuro Developmental Treatment (NDT) method is provided to help improve postural control and motor abilities in children. **Objective:** This study was conducted to determine the physiotherapy management of a case of down syndrome at PMI Hospital Bogor. **Methods:** This study used a case study design with a descriptive-analytic approach to evaluate the effectiveness of physiotherapy interventions. The research subject was a child with Down syndrome aged 8 months and 21 days. Outcome measures were assessed using comprehensive standard instruments, including static inspection, dynamic inspection, palpation, XOTR Scale, movement pattern examination, Sensory Profile, Gross Motor Function Measure (GMFM), and primitive reflex evaluation. The collected data were analyzed to describe the development of motor abilities and the patient's level of functional independence. **Results:** After three evaluations, improvements were found in the Gross Motor Function Measure (GMFM), XOTR Scale, joint laxity, and primitive reflexes, while no changes were found in the sensory examination results. **Conclusion:** Children with Down Syndrome experience impairments such as hypotonia, joint laxity, and delayed motor development, which result in suboptimal postural control and gross motor abilities. Physiotherapy management using the Neuro Developmental Treatment approach through sensorimotor stimulation, weight-bearing exercises, and positioning exercises aims to gradually improve body stability, postural control, and the child's basic motor skills..

Keywords: Physiotherapy, Down syndrome, GMFM, XOTR Scale, Sensory Profile, Primitive Reflex, NDT (Neuro Developmental Treatment).