

## Faktor risiko yang memengaruhi keterlambatan perkembangan motorik kasar pasien sindrom down = Risk factors influences gross motoric development in children with down syndromes

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### Abstrak

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Latar belakang : Sindrom Down merupakan penyakit genetik yang dapat menyebabkan keterlambatan perkembangan motorik, bahasa, kognitif, dan psikososial. Periode perkembangan anak dalam tiga tahun pertama kehidupan sangat penting, karena merupakan dasar untuk hasil perkembangan selanjutnya. Sampai saat ini belum dilakukan penelitian yang menghubungkan kemampuan motorik pasien sindrom Down dengan faktor-faktor yang memengaruhinya. Mengingat prevalensi anak sindrom Down yang cukup banyak di Indonesia, dan belum didapatkan data tersebut maka penelitian dilakukan pada anak sindrom Down sehingga anak sindrom Down mendapatkan hasil optimal dari program intervensi yang dijalankan

Tujuan : Mengetahui karakteristik pertumbuhan dan perkembangan motorik anak sindrom Down serta faktor yang memengaruhi tingkat perkembangan motorik kasar untuk menentukan kemampuan anak, kebutuhan terapi dan meningkatkan kualitas pelayanan.

Metode: Studi potong lintang deskriptif dan analitik selama Agustus sampai September 2015 pada 103 anak sindrom Down usia 6 bulan - 3 tahun di Poli Anak dan Poli Rehabilitasi medis Rumah Sakit Cipto Mangunkusumo (RSCM). Data orang tua didapat dari autoanamnesis dan pencarian rekam medis, data antropometrik berupa berat badan, tinggi badan dan lingkar kepala diplot pada kurva pertumbuhan khusus anak sindrom Down, perkembangan motorik kasar dinilai berdasarkan milestone khusus anak sindrom Down.

Hasil penelitian : Sejumlah 103 subjek (56 laki-laki, 47 perempuan) memenuhi kriteria inklusi. Median subjek adalah 12 bulan. Jumlah subjek yang mengalami gizi baik dan gizi kurang hampir sama. Mikrosefali dialami oleh sebagian kecil subjek 10 (9,6%). Anak sindrom Down dengan tipe klasik ditemukan pada sebagian besar pasien sebanyak 99 (96%) dan tipe translokasi sebanyak 4 (3,9%).

Keterlambatan motorik ringan dialami oleh 69,2% subjek, keterlambatan motorik sedang 16,3%, dan keterlambatan motorik ringan 13,5%. Hasil analisis multivariate memperlihatkan faktor risiko yang berhubungan dengan keterlambatan motorik adalah lingkar kepala ( $p=0,011$ ; OR 6,852; IK95% 1,565-30,038), riwayat asfiksia ( $p=0,009$ ; OR 4,033; IK95% 1,427-11,4), dan frekuensi program stimulasi ( $p=0,006$ ; OR 3,845; IK95% 1,460-10,125).

Kesimpulan : Lingkar kepala, riwayat asfiksia, dan frekuensi program stimulasi merupakan faktor risiko keterlambatan perkembangan motorik anak

sindromDown.<b>ABSTRACT</b><br> Background : Down Syndrome is one of genetics disease that could cause delayed

motoric, language, cognitive, and psycho-social development. Development of the first three years of life is crucial, because it is a basic for further development. Until recently, there are not study which conducted to correlates motoric capabilities Down Syndromes patients to factors that interfere its. In Indonesia, prevalence of child with Down Syndromes is quite high, there are no data depicted that correlation;hence, this study was conducted in child with Down Syndromes so that they obtained optimal outcome from intervention program conducted.

Aim: To know characteristics of motoric growth and development in children with Down Syndromes and factors interfere degree of gross motoric development which to determine children's capability, needs therapy, and improves quality of service.

Methods : A descriptive cross-sectional study was conducted to 103 children with Down Syndromes aged 6 months ? 3 years old in Pediatrics Outpatient Clinics and Medical Rehabilitation Outpatient Clinics of Rumah Sakit Cipto Mangunkusumo (RSCM) during August to September 2015. Data were obtained by their parents (auto-anamnesis) and medical records, anthropometric data comprised body weight, body height, and head circumference which were plotted to special growth curve of children with Down Syndromes, gross motoric developments were assessed by special milestone of children with Down Syndromes.

Results : One hundred and three subjects were fulfilled as inclusion criterions.

Median subject was twelve months. Amount of subjects with good nutrition and malnutrition were equal. Subjects with microcephaly were 10 (9.6%). Children with classical type of Down Syndromes were 99(96%) and translocation type were 4(3.9%). Children with mild motoric development were 69.2%, intermediate motoric development were 16.3%, and severe motoric development were 13.5%.

Multivariate analysis showed risk factors correlates to motoric development were head circumference ( $p=0,011$ ; OR 6,852; CI 95% 1,565-30,038), history of asphyxia ( $p=0,009$ ; OR 4,033; CI 95% 1,427-11,4), and frequency of stimulation programs ( $p=0,006$ ; OR 3,845; CI95% 1,460-10,125).

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