Perbandingan fungsi kognitif anak dengan gangguan gizi dan anak dengan gizi normal = Cognitive function difference in children with malnutrition and adequate nutritional status

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Abstrak

[ABSTRAK
Latar Belakang: Gangguan gizi pada anak dapat menyebabkan terganggunya proses perkembangan otak yang berakibat pada terjadinya gangguan fungsi kognitif. Fungsi kognitif tersusun atas berbagai domain kognitif yang saling berkaitan. Belum ada studi di Indonesia mengenai gambaran fungsi masing-masing domain kognitif pada anak dengan gangguan gizi jika dibandingan anak dengan gizi normal.
Metode: Studi ini merupakan studi potong lintang pada 68 anak dengan gangguan gizi dan 68 anak dengan gzi normal pada kelompok usia 6-9 dan 9-12 tahun. Pemeriksaan fungsi kognitif dengan menggunakan Forward Digit Span, Backward Digit Span, Trail MakingTest, Block Building Test, Boston Naming Test, Grooved Pegboard Test, Rey Osterrieth Complex Figure Test dan Rey Auditory Verbal Learning Test.
Hasil: Anak dengan gangguan gizi pada kedua kelompok usia menunjukkan hasil pemeriksaan fungsi kognitif yang lebih buruk daripada anak dengan gizi nomal pada domain atensi, memori, visuospasial, eksekutif dan bahasa (p<0,05). Tidak ada perbedaan bermakna untuk fungsi psikomotor pada kedua kelompok.
Kesimpulan: Terdapat perbedaan bermakna antara fungsi kognitif untuk domain atensi, memori, visuospasial, eksekutif dan bahasa pada anak usia 6-12 tahun dengan gizi normal dan anak dengan gangguan gizi.
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ABSTRACT
Background: Malnutrition in childhood is associated with both structural and functional pathology of the brain which may lead to cognitive deficits. Cognitive function is built on many cognitive domains which works together in a complicated network. Recently, no study in Indonesia has been done to evaluate the function of each cognitive domain ini children with malnutrition.
Methods: The study was cross sectional, involving 68 malnourished children and 68 adequately nourished in the age groups of 6-9 and 9-12 years. Cognitve function examination was based on Forward Digit Span, Backward Digit Span, Trail MakingTest, Block Building Test, Boston Naming Test, Grooved Pegboard Test, Rey Osterrieth Complex Figure Test and Rey Auditory Verbal Learning Test.
Result: Malnourished children on both age groups show poorer cognitive performance on test of attention, memory, visuospatial, executive, and language (p<0,05). No significant difference on psychomotor function on both groups.
Conclusion: There are significant difference for the function of attention, memory, visuospatial, executive, and language on children with malnutrition and with normall nutritional status., Background
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