

ABSTRACT

Feeding difficulty in cerebral palsy: association with motor function and parents' perception

Fransiska Herintyo, Mei Neni Sitaresmi, Retno Sutomo

ABSTRACT

Background: Cerebral palsy is the most common motor and postural disorder in children and feeding difficulty is a common problem among them. Feeding difficulty is affected by daily motor function and if not addressed can lead to malnutrition.

Objectives: To assess the association between gross motor function, fine motor function, and feeding difficulty, to assess the correlation between feeding difficulty and nutritional status, and to explore parents' perceptions and experiences about feeding difficulty.

Methods: We conducted a mixed-method study, with parents of cerebral palsy aged 3 to 16 years old, who attended Growth Development Clinic DR. Sardjito Hospital, Indonesia, from December 2021 to March 2022. The first stage was a quantitative study to assess feeding difficulty using the Eating and Drinking Ability Classification System (EDACS) and to define an association between motor function and feeding difficulty. Gross motor function was assessed by Gross Motor Function Classification Scale (GMFCS) and fine motor function was assessed by Bimanual Fine Motor Function (BFMF). The second stage was a qualitative study to explore parents' perceptions and experiences during mealtime using in-depth interviews. Data from the quantitative study was analysed using chi-square and logistic regression. Thematic analysis was performed from the qualitative study.

Results: Eighty-four patients were included in the quantitative study. There were 41 (48.8%) subjects with feeding difficulty. Subjects with GMFCS III – V have an odds of 6.8 to experience feeding difficulty compared to those in GMFCS I – II (95% CI = 2.04 – 23.3). Subjects with BFMF II – V have odds of 16.2 to experience feeding difficulty compare to those with BFMF I (95% CI = 1.7 – 149.8). Eleven parents were interviewed. Seven parents did not consider their children having feeding difficulty during mealtime and they did not obtain suggestions as expected.

Conclusions: The feeding difficulty was common among cerebral palsy patients, however; most parents did not consider it a problem. Gross motor function and fine motor function were associated with feeding difficulty.

Keywords: Cerebral palsy, gross motor function, fine motor function, feeding difficulty, parents' perception.

INTISARI

Kesulitan makan pada palsy serebral: hubungan dengan fungsi motorik dan persepsi orang tua

Fransiska Herintyo, Mei Neni Sitaresmi, Retno Sutomo

Latar Belakang: Palsy serebral merupakan gangguan motorik dan postur yang paling sering dijumpai pada anak dan kesulitan makan merupakan masalah yang sering dijumpai pada penderitanya. Prevalensi kesulitan makan pada palsy serebral cukup tinggi. Kesulitan makan dipengaruhi oleh kemampuan motorik sehari-hari yang bila tidak dikenali dapat menyebabkan malnutrisi.

Tujuan: Menilai hubungan fungsi motorik kasar, fungsi motorik halus dan kesulitan makan serta mengeksplorasi persepsi dan pengalaman orangtua mengenai kesulitan makan.

Metode: Penelitian *mixed method* dilakukan terhadap penderita palsy serebral yang datang berkunjung ke Klinik Tumbuh Kembang RSUP DR. Sardjito Yogyakarta. Tahap pertama adalah studi kuantitatif untuk menilai kesulitan makan dengan Eating and Drinking Ability Classification System (EDACS), kemudian dinilai hubungannya dengan fungsi motorik. Fungsi motorik kasar dinilai dengan *Gross Motor Function Classification System* (GMFCS), dan fungsi motorik halus dinilai dengan *Bimanual Fine Motor Function* (BFMF). Tahap kedua adalah studi kualitatif pada pasien dengan kesulitan makan untuk mengeksplorasi persepsi dan pengalaman orang tua tentang kesulitan makan. Data kuantitatif dianalisis menggunakan Chi Square dan regresi logistik, dari studi kualitatif diperoleh tema sebagai hasil analisis.

Hasil: Delapan puluh empat anak terlibat dalam penelitian ini dan didapatkan 41 subyek (48,8%) dengan kesulitan makan. Subyek GMFCS III – V mempunyai odds 6,8 untuk mengalami kesulitan makan dibandingkan dengan subyek GMFCS I – II (IK 95% = 2,04 – 23,3). Subyek BFMF II – V mempunyai odds 16,2 dibandingkan dengan subyek BFMF I (IK 95% = 1,7 – 149,8). Tujuh responden merasa bahwa proses yang mereka jalani selama pemberian makan bukan merupakan masalah.

Simpulan: Kesulitan makan sering dijumpai pada pasien palsy serebral, namun sebagian orang tua tidak menganggap itu sebagai masalah. Kemampuan motorik kasar dan motorik halus berhubungan dengan kesulitan makan.

Kata kunci: palsy serebral, fungsi motorik kasar, fungsi motorik halus, kesulitan makan, persepsi orang tua