ABSTRACT

Growth and Development in Children with Down Syndrome at Surabaya

Background: The number of children with Down Syndrome at Indonesia is considerable, however any data about the children’s growth and development is still limitedly available. Previous studies mentioned that several factors are correlated to children’s development. The objective of this study was to know the nutritional status and the development of children with Down Syndrome and know the correlation between parent’s socioeconomic status, parents’ education level, early intervention onset, and congenital anomaly with children’s development.

Methods: This cross-sectional with total sampling study involved 31 children with Down Syndrome and parents who were joined in POTADS Surabaya in March 2017. The sample numbers that fulfilled the criteria were 24 patients with 0-71 months age range. The data was collected by assessing the children, interviewing the parents by questionnaire, and analysing by chi-square test with p-value (p) <0.05 and confidence interval (CI) 95%.

Results: The nutritional status of children with Down syndrome was mostly normal respectively and the development was mostly significantly delayed. There was no significant correlation between parents’ socioeconomic status (p=0.281), parents’ education level (p=0.173 in father; p=0.478 in mother), children’s congenital anomaly (p=0.525 in CHD; p=0.901 in Hypothyroidism) with children’s development, however any significant correlation between early intervention onset and children’s development (p=0.027)

Conclusion: The growth in children with Down Syndrome at Surabaya was mostly normal, but the development was mostly significantly delayed. Children’s early intervention onset was identified to have significant correlation with development.

Keywords: growth, development, down syndrome, socioeconomic status, education level, congenital anomaly, early intervention onset