

**FACTORS THAT AFFECT DEVELOPMENT OF MOTOR
FUNCTION IN CHILDREN WITH CEREBRAL PALSY**

By

Samena Akter Kakuli

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**Bangladesh Health Professions Institute
(BHPI)
Faculty of Medicine
University of Dhaka**



Abstract

Background: Motor function development has been regarded as normal phenomena during the developmental period. In contrast, abnormalities in normal childhood development due to cerebral palsy (CP) consequently resulting in delayed normal gross motor and fine motor function. *Objectives:* To identify the factors such as socio-demography, medical, parental attitude, influence of devices and environmental that affects the motor functions in children with CP. *Methodology:* Cross sectional descriptive study design. Total numbers of participants were 302. *Measurement tools:* GMFCS and PAFT scale. *Analysis:* Descriptive statistics was done using SPSS. *Results:* Mean age among 302 participants were 4.41(\pm 2.41) years in which 171 were boy and 131 were girl. There were 148 participants in range 2-4 years, 73 in 4-6 years and 81 in 6-12 years. Among 302 participants, majority of the participants (70) of PAFT scale showed slight slower movement than normal. In socio-demographic factor, no significant association was found between siblings, parent's income, education and GMFCS and PAFT scale except BMI and age range 4-6 years ($p < .05$). In medical factors, there were no significant association between place of delivery, length of intrauterine life, birth weight, convulsion and jaundice with GMFCS and PAFT. However, visual and hearing problem ($p < .05$), birth trauma ($p = .03$) and abnormal muscle tone in limbs ($p = .00$) significantly affect GMFCS and PAFT scale of CP children. Parents attitude and level of caring factor was statistical significantly associated ($p = .00$) with eating with hands, dressing upper and lower body, toileting and bladder management and PAFT scale. In orthotic and assistive device factor, 117 participants used either device and rest of 185 were not using for mobility. Cross tabulation between use of these devices and GMFCS showed that significant association was observed ($p = .006$) in age range 2-4 years and others were not statistically significant. In environmental factor, among 302 participants 148 had stairs at home and 154 did not have. In this factor, use of device is significantly ($p = .00$) associated with stairs at home or space inadequacy. *Conclusion:* This thesis found several factors that affect the normal motor functions. However, descriptive findings of this thesis would guide physiotherapist who have been working in pediatric unit to address new treatment techniques to minimize effects of CP in future time.

Key words: Motor function, Cerebral Palsy.