**Title: Effect of children’s socio-economic and health status in Early Childhood Education Programs in Bangladesh: A cross-sectional Study of MICS-2019**

**Abstract:**

**Introduction:** Early Childhood Education (ECE) programs are one of the vital parts of UNESCO's development objective as ECE programs exhibit a positive development of children in their childhood life as well as future life. Children who attain ECE programs are more likely to complete their further primary studies than their counterparts. ECE program enrollment rate among children between 36 to 59 months in Bangladesh is subsequently very low. Different types of covariates such as the mother's education level, Early childhood disease, and nutritional status (underweight, stunting, Wasting, and overweight) have been used for this study. The main objective of this study is to find out the effect of different socio-economic and health-related variables on the ECE program enrollment rate.

**Methodology:** This study has obtained data from the Multiple Indicator Cluster Survey (MICS) 2019. For this study, a total number of 9447 children between 36 to 59 months of age has been selected. Descriptive statistics and the chi-square test have been used in this study to find the relationship between the dependent and independent variables. Multinomial logistic regression has been used to find the association of the independent variables’ independent variables.

**Result:** 19.86% of male children and 18.92% of female children have enrolled in ECE programs. Children from the urban and rural areas have a respective 23.64% and 18.27% participation in ECE programs. For secondary Complete or Higher mothers, the Odd Ratio (OR) is 2.20 (CI: 1.61-3.02) compared to the primary incomplete mothers. ECE program enrollment among children from the Richest families has an OR of 1.23(CI: 0.93-1.64) compared to the poor families. Households that contain picture books for children have an OR of 1.76 (CI:1.5-2.07) compared to their counterparts. Stunned children have an OR of 0.60 (CI: 0.49-0.73) compared to their counterparts.

**Conclusion:** The conclusion emphasizes the need to increase ECE program participation by emphasizing health factors, mother's education, and socioeconomic factors. It emphasizes the significance of social awareness, parental education, and girl's education in promoting early childhood education.

**Keyword:** Early Childhood Education (ECE) programs, Early childhood disease, mother’s education, socioeconomic status, stunting, wasting, underweight.