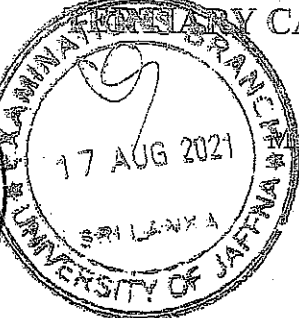
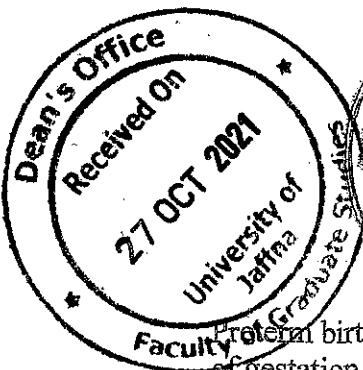
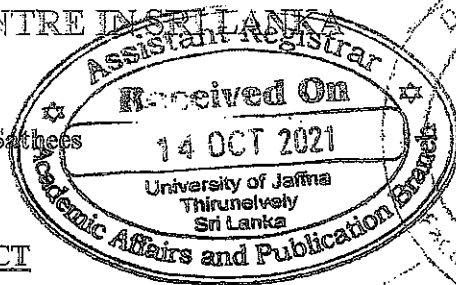


SHORT AND LONG TERM OUTCOMES AND ASSOCIATED
FACTORS IN A COHORT OF PRETERM BABIES BORN AT
NEONATAL INTENSIVE CARE CENTRE IN SRI LANKA



Mrs. Sasrubi Sathes

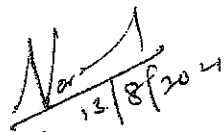


ABSTRACT

Preterm birth, defined as childbirth occurring at or less than 37 completed weeks or 259 days of gestation and is a major determinant of neonatal mortality and morbidity. An institutional-based cohort study was carried out to determine the short and long term outcomes and associated factors among cohort preterm babies born in Teaching Hospital Jaffna between October 2015 and February 2017. Anthropometric measurements, neuro-developmental scores using Bayley-III, and behavioral patterns at the end of 3, 6, 12, and 18 months of age of 167 preterm babies of their corrected age prematurity were obtained, excluding 5 babies who died during follow-up. The results were analyzed using SPSS version 16.0, chi-square test, paired t-test, one-way ANOVA test, logistic regression, trend analysis, and Kaplan-Meier survival. Following maternal factors were identified as risk for very preterm delivery; aged teens (OR:1.895), Hinduism (OR:1.447), living in the nuclear family (OR:1.274), primi (OR:3.021), maintained pregnancy interval of <1 year (OR:1.117), had sexual intercourse before two weeks of delivery (OR:1.607) and diagnosed with pregnancy complications (OR:1.695). The majority of the preterm babies were males (54.3%). The mean birth weight, body length, and head circumference of the preterm babies were 2.2 (± 0.6) kg, 46.3 (± 4.8) cm, and 32.0 (± 3.3) cm respectively. Catch-up weight was reached by moderate to late preterm babies at 18 months, while body length was in risk status. But very preterm babies reached catch-up in body weight and length at 6 months and maintained in the normal range. The following factors were identified as risk for delay in both body weight and length catch-up; the babies who were born with low birth weight, (OR:1.420), admitted to neonatal intensive care unit (OR:1.627), and re-hospitalized (OR:1.231). The following factors were identified as risk for neuro-developmental delay; children of employed mothers (OR:1.354), born at very preterm (OR:1.460), treated for short-term complications (OR:2.337), admitted to neonatal intensive care unit (OR:2.653), stayed at the hospital for more than 2 weeks (OR:1.317), discharged from hospital with complications related to prematurity (OR:2.857), re-hospitalized (OR:7.664). The behavioral problem, i.e. inattention was recorded in four children.

Keywords: Preterm babies, short term outcome, growth pattern, neuro-development, behavioral pattern.

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