

## Influence of Gestational age on Birth Profile of Preterm Babies Born in Teaching Hospital, Jaffna

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In Sri Lanka, approximately 24,500 babies are born premature each year, which can negatively influence the growth of infants and early childhood development. A prospective cross-sectional study was carried out in Teaching Hospital, Jaffna, among 173 preterm babies who were born between 28 and 37 weeks of gestational period from October 2015 to February 2017. Aim of this study was to determine the influence of gestational age on birth order, mode of delivery, birth weight, gender, Appearance, Pulse, Grimace, Activity, and Respiration (APGAR) score and the requirements of special neonatal care of the preterm babies. A pretested questionnaire was administered and univariate test in SPSS 16.0 was used to analyse the data. Median gestational age was 35.71 weeks and 64.7% (n= 112) of the deliveries occurred at the gestational age of 35-36<sup>+6</sup> weeks. Nearly 54.9% (n=95) of deliveries were carried out by Cesarean section. Among them 75.8% (n=72) of the deliveries were carried out under emergency situations. Among the preterm babies, 52.6% (91 babies) were males. Nearly 49% of the deliveries (n=85) occurred to primi-mothers. The mean birth weight of the preterm babies was 2.23 ( $\pm 0.58$ ) kg while those of babies born at 28<sup>+1</sup>-30<sup>+6</sup> and 35-36<sup>+6</sup> weeks of gestation were 1.40 ( $\pm 0.04$ ) and 2.45 ( $\pm 0.49$ ) kg respectively and the birth weights were significantly different (p=0.001). Among the preterm babies 57.2, 9.8 and 0.6% respectively had low birth weight, very low birth weight and extremely low birth weight. Among the preterm babies, 71% (n=123) had the APGAR score of 9/10/10; and among 71%, 76% (n=96) were delivered at 35-36<sup>+6</sup> weeks of gestation. Special neonatal intensive care was provided to 74 (42.8%) preterm babies. Among those babies who were born at 28<sup>+1</sup>-30<sup>+6</sup> and 35-36<sup>+6</sup> weeks of gestation, 100% (n=07) and 26.8% (n=30) respectively obtained neonatal intensive care and the difference was statistically significant (p<0.000). The mean duration of neonatal intensive care provided was 9.54 ( $\pm 8.49$ ) days. Gestational age of preterm babies had statistically significant relationship with birth weight (p=0.001) and neonatal intensive care support (p<0.000).

**Keywords:** Preterm babies, Gestational week, Mode of delivery, Birth weight, gender, APGAR score, Neonatal intensive care