

Thesis Title            The Symphysis-fundus Height Graph for prediction of  
                         Low Birth Weight Infants at Term, Rajavithi Hospital  
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#### ABSTRACT

The Purpose of this Crosssectional Study was to create the Symphysis-fundus height graph of pregnancy gestational age between 20-41 weeks and find out sensitivity and specificity of this Symphysis-fundus height graph for prediction of Low Birth Weight Infants at term. Related variables were Symphysis-fundus height (SF), Gestational age (GA) and Infants Birth Weight (BW). Each weeks, one hundred and seventy of maternal records from ANC. and newborn records from delivery room at Rajavithi Hospital between January - February 1992 were analyzed to find a cut-off point of the Symphysis-fundus height at risk to delivery Low Birth Weight Infants at term and additional one hundred seventy maternal and newborn records were used to prove the validation of the Symphysis-fundus height graph.

The statistical package of social sciences (SPSS/PC<sup>+</sup>), Lotus were used to analyze the results i.e. percentage, arithmetic mean, standard deviation, the cut-off point of the Symphysis-fundus height at risk to delivery Low Birth Weight Infants at term, and the

## Simple Regression Analysis.

The findings were as follows:

1. The Symphysis-fundus height graph was created between gestational age 20-41 weeks. Sensitivity was between 40-100% and Specificity was between 27.27-78.37 %.

2. To prove the validation of the Sympysis-fundus height graph for prediction of Low Birth Weight Infants at term, sensitivity was between 42.85-91.67 % and specificity was between 32.31-69.33 %.

3. The Simple Regression analysis showed in group 5 (gestational age between 37-41 weeks) the Symphysis-fundus height had positive significant correlation with Infants Birth Weight  $r=0.487$  ( $p\text{-value}<0.005$ ), The Symphysis-fundus height was accounted for 23.75 % variation in Infants Birth Weight ( $p\text{-value}<0.001$ ). It was also found that positive significant correlation between the Symphysis-fundus height and Gestational age  $r=0.914$  ( $p\text{-value}<0.005$ ). The Gestational age was accounted for 83.53 % variation in the Symphysis-fundus height ( $p\text{-value}<0.001$ ). The regression equation was as follow

$$\text{The Symphysis-fundus height} = .22 + (.86)\text{Gestation age}$$

The use of Symphysis-fundus height graph as a screening test to detect Low Birth Weight Infants at term among pregnancy women who have risk, especially gestational age between 27 - 41 weeks. This graph were usefulness when use with caution.