

**Title of the thesis**

**GROWTH AND NUTRITIONAL STATUS OF RURAL  
BENGALEE PRE-SCHOOL CHILDREN OF INTEGRATED  
CHILD DEVELOPMENT  
SERVICE (ICDS) SCHEME OF CHAPRA  
BLOCK OF NADIA DISTRICT, WEST BENGAL**

**THESIS SUBMITTED TO VIDYASAGAR UNIVERSITY  
FOR AWARD OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY (SCIENCE)  
IN  
ANTHROPOLOGY**

**SUBMITTED BY  
SADARUDDIN BISWAS**

**DEPARTMENT OF ANTHROPOLOGY  
VIDYASAGAR UNIVERSITY  
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## **SYNOPSIS OF Ph.D. THESIS**

### **The objectives of the study:**

1. To understand the growth pattern of the 3.0-5.5 years old rural Bengalee pre-school children of Integrated Child Development Service (ICDS) scheme.
2. To evaluate age and sex variation of growth of these children.
3. Comparison of growth pattern of these children with other national and international studies.
4. To evaluate nutritional status of these children.
5. To compare the nutritional status of these children with other national and international studies.
6. To identify the other possible factor(s), which is (are) related to growth and nutritional status of these children

### **Materials and methods:**

The cross sectional study was conducted among 2016 (930 boys, 1086 girls) aged 3.0 – 5.5 years old rural Bengalee preschool children from randomly sixty six Integrated Child Development Service (ICDS) scheme centres of Chapra Block, Nadia district, West Bengal, India.

Attempt had been made to study the interrelationship between different anthropometric measures, which were particularly useful in assessment of nutritional status; impact of socio-economic status on anthropometric measures and nutritional status; parents' educational status, fathers' occupational status; birth order of the children; number of sibs, brothers and sisters and place of delivery of the children.

### **Findings and Conclusion:**

1. The mean values of most of the anthropometric characteristics and indices among boys were higher than girls. Mean values of the most of the anthropometric characteristics increased with increasing age among the children. Significant age (sex combined) variations were observed in the most of the anthropometric characteristics.

2. In both sexes, the correlations of age with anthropometric characteristics were similar. Most of the anthropometric characters showed significantly correlations with age.
3. The overall (age and sex combined) rate of underweight, stunting, wasting, thinness, MUAC based undernutrition and head circumference based undernutrition were 48.31 %, 48.21 %, 10.57 %, 50.69 %, 34.70 % and 38.40 % respectively.
4. Different socio-economic and socio-demographic variables showed significant association with nutritional status measurers variables (WAZ, HAZ, WHZ, MUAC, Head circumference, BMI). But strongest association was found between place of delivery of children (POD) and nutritional status measurer variables.
5. Results of linear regression also showed that Place of delivery of the children (POD) strongest impact on nutritional measurers variables.
6. The results of multiple linear regression analyses revealed that POD had strongest independent effect on WAZ, HAZ, WHZ, MUAC, Head circumference, BMI among the children.
7. The results also revealed that POD was a strongest independent predictor of all types of undernutrition status among the children.
8. Most of the anthropometric characteristics showed lower median values than median values of different reference
9. From the results of the present study we can conclude that the nutritional status of the subjects is not satisfactory and it seems that there is a scope for much improvement in the form of enhanced supplementary nutrition than what is currently being offered by the ICDS scheme in Chapra Block.
10. Government needs to spend more money on quality nutritional programs in order to improve the state of malnutrition, health services, education and poverty.
11. All concerned authorities should promote health awareness programmes regarding the benefits of institutional delivery. The government must take appropriate and proactive steps for the universal access to institutional delivery in rural areas.