

Effect of Dietary Intervention on Anthropometry and Scholastic Performance in Children with Congenital Heart Diseases

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CASE STUDY

Objective: To assess the effect of dietary intervention on anthropometry and scholastic performance in children with congenital heart diseases.

SUBJECTS AND METHODS

A. Study Subjects

The study involve children aged 5-10 years.

B. Type of Study

Prospective observational study.

C. Place of the Study

Paediatrics OPD (outpatient department) of Shri Sathya Sai Medical College and Research Institute, Kancheepuram District.

D. Inclusion Criteria

Children with congenital heart diseases aged between 5-10 years visiting Paediatrics OPD in Shri Sathya Sai Medical College and Research Institute.

E. Exclusion Criteria

1. Hemodynamically unstable.
2. Child with cerebral palsy or other neurological defects.

F. Study Period

6-Months

G. Ethical Clearance

Obtained

H. Data Collected

The total calories in the child's diet are taken by 24 hours recall method. The percentage calorie deficit is calculated. The child's anthropometric measurements are taken. If weight for age is less than-2 standard deviation, the child is considered as underweight.

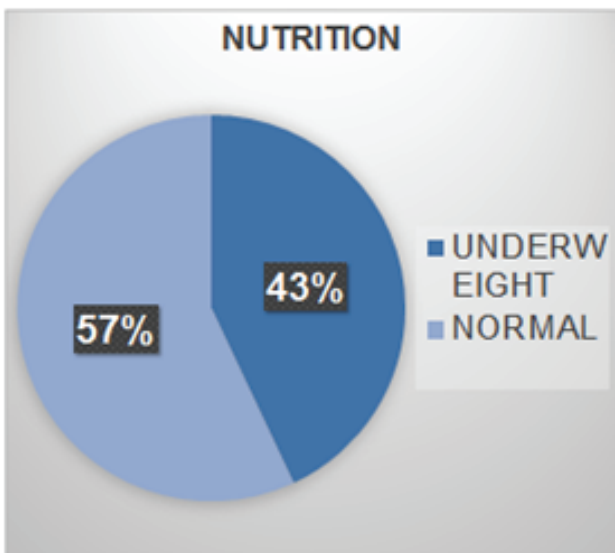
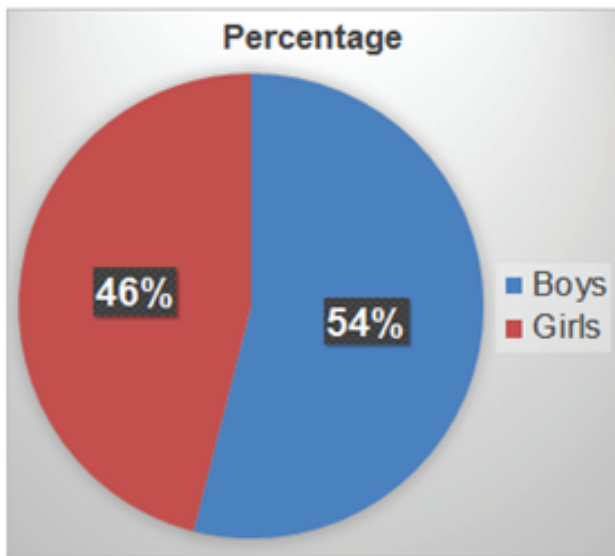
Child scholastic performance was measured using five point likert scale for reading, writing and mathematics Dietary advice is given to the child. After 6 month, the children were reassessed. Weight and height were measured and scholastic performance was measured.

Statistical Analysis

Data was entered in MS-Excel and Statistical Analysis was done by SPSS 23 software. 5 % level of significance and 95 % confidence interval was used.

Data and Results

Parameter	P-value
Weight Gain	0.030
Scholastic Performance	0.030



RESULTS

60% of children with congenital heart diseases were undernourished. Diet intake and scholastic performance were low in these children. At the end of study period, as a result of dietary intervention there was significant improvement in weight for age and scholastic performance.

CONCLUSION

This study shows that undernourished children with congenital heart disease who were given nutritional counselling showed improved anthropometric measure and significant improvement in their school performance.

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