ABSTRACT

INTRODUCTION:

Congenital heart defect (CHD) is the most common defect among all birth defects representing a major global health problem. Twenty-eight percent of all major congenital anomalies comprise of heart defects. Congenital heart disease (Cyanotic and Acyanotic) occurs in approximately 0.8% of live births. In India, the prevalence of CHD is not uniform across the country and varies from 0.8 to 5.2/1000 patients in community-based studies while the prevalence ranges between 3.9 and 26.4/1000 live births in hospital-based studies in India, which is not uniform across the country. The burden of CHD is high in developing countries like India, due to the high birth rate and critical nature of CHD requiring expensive surgical and non-surgical interventions. CHD is considered a real challenge because of the complex interplay between medical, surgical, dietetic and socio-economic factors.

AIMS AND OBJECTIVES:

- To find out the Nutritional Status in children (1-12 years) with congenital heart disease by using anthropometric measurements, clinical assessment and dietary evaluation
- To assess degree and type of Anemia in children with congenital heart disease using assessment of hemoglobin, red cell indices, red cell distribution width and peripheral smear

METHODS:

We conducted an cross sectional study of 80 children aged 1-12 years of age with congenital heart disease chosen by purposive sampling technique, attending as
Outpatient and Inpatient in the Department of Pediatrics, Sree Mookambika Institute of Medical Sciences, Kulasekharam over a period of 18 months

RESULTS:

In this study on 80 children, 63.8% were in the age group 1-12 years whereas 36.2% belonged to age group 12mon-59mon. The male to female ratio was 1:1. 81.3% had ACHD, out of which VSD was the most common (35%). 18.7% had CCHD, out of which TOF was the most common (13.7%). 69.2% of ACHD were underweight in comparison to 35.7% in CCHD with significant p value 0.025. 42.9% of ACHD were stunted in comparison to 57.1% in CCHD with significant p value of 0.004. 80% of ACHD were wasted in comparison to 20% wasted in CCHD. 21.3% of ACHD had anemia, 17.5% of CCHD had polycythemia. 21.2% had decreased red cell indices indicating microcytic hypochromic and 36.2% had increased RDW with p value 0.000 indicating nutritional anemia. According to Peripheral smear, 16.2% had microcytic hypochromic anemia.

CONCLUSION:

Congenital heart defect (CHD) is the most common congenital malformation among all birth defects leading to morbidity and mortality among children. The burden of CHD is high in developing countries like India, due to the high birth rate and critical nature of CHD requiring expensive surgical and non-surgical interventions. Malnutrition and anemia is rampant among children with CHD with a significant impact on the intervention and the outcome of intervention. The high proportion of malnutrition and anemia among children with CHD warrants proper evaluation and early intervention. This is of utmost importance as majority of CHD
are likely to get surgical and non surgical intervention under the RBSK scheme. The RBSK scheme also focuses on malnutrition and deficiency disorder. Accreditation of private institution under the RBSK scheme for intervention of CHD is a big boon to the community

**Keywords:** Congenital Heart Disease, Nutritional Statutus, Anemia,