

**STUDY ON PREVALENCE OF ANAEMIA AMONG THE STUDENTS  
OF 10 TO 15 YEARS OF J/NAVATKULI MAHA VIDYALAYAM,  
JAFFNA, SRILANKA**

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**Abstract**

Anaemia is a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal. Haemoglobin is needed to carry oxygen and if you have too few or abnormal red blood cells, or not enough haemoglobin, there will be a decreased capacity of the blood to carry oxygen to the body's tissues. This results in symptoms such as fatigue, weakness, dizziness and shortness of breath, among others. The optimal haemoglobin concentration needed to meet physiologic needs varies by age, sex, elevation of residence, smoking habits and pregnancy status. The most common causes of anaemia include nutritional deficiencies, particularly iron deficiency. The prevalence is high specifically in school children and pregnant women. This study was designed to evaluate the prevalence of anaemia among the school going children in a rural area.

A prospective study was carried out among the school students between the ages of 10-15 year, and identify the anaemia in the study population is hundred (100) students of grade 6-9 at J/Navatkuli Maha Vidyalayam. The haemoglobin levels were estimated using Sahli's haemometer by acid haemolysis method. The reports of haemoglobin levels in 100 children revealed that 67% were anaemic and 33% were non-anaemic. When the occurrence pattern of anaemia was compared to the age distribution, 19% of anaemic children were between the age group of 10-11 years, 23% between 12-13 years, 25% between 14-15 years. Based on the above results, the age group of children found highly susceptible to anaemia were between 14 to 15 years. The gender categorization reveals the prevalence of anaemia was high in females than in males. Among the 67 anaemic children, 22% were found to be male where as 45% were found to be female children. Out of the 67 anaemic children, 17 % were found to have haemoglobin below 7 g/dl percentage, 23 % have between 7- 10 g/dl and 27 % between 10-12 g/dl level. The Body Mass Index of the children was calculated by using weight by height ratio. Out of 100 children, 69% had below normal BMI, 24% had normal BMI and 7% had above normal BMI.

The study was carried out to understand the current prevalence pattern of anaemia among school going children in the rural area of the city and to enhance the health status of children and raise the awareness about these diseases in the rural population. As anaemia is one of the major public health problem in Srilanka, a comprehensive plan to overcome this problem is important. National guidelines can be followed for the prevention and management of anaemia.

**Keywords:** Anaemia, School children, Jaffna