Summary

Iron deficiency adversely affects physical and mental development in infants and children worldwide. The prevalence of iron deficiency among children in developing countries exceeds 50% and is usually attributed to inadequate nutrition. Although the iron deficiency is most high-prevalence among school aged children in developing nations due to poor nutrition or parasitosis.

H. pylori infection has a worldwide distribution. In the developed world, the prevalence of H. pylori infection in children can be as low 5% compared with the figures of over 80% in developing countries. H. pylori infection is strongly associated with gastritis, there is also evidence to suggest that in newborns and infants it is linked to diarrhea, malnutrition, failure to thrive and stunted growth.

The aim of this study is to estimate the association between iron deficiency anemia and active H pylori infection among primary school children.

In the present study is concerning the relation between H. pylori and iron deficiency anemia. We have randomly selected 200 children with age 6-12 years. All the children of the study, were subject to full history taking, thorough to clinical examination assess their health state and to check for inclusion and exclusion criteria and laboratory investigations.

Assessment of growth using the growth parameters as height, weight and BMI was done.

Exclusion criteria were cases that have any chronic diseases, those who received antibiotic or antiacid within the last 30 days before examination and investigation or those who received iron therapy .

Samples of blood and stool were taken from all selected children, assessed for active H. pylori infection and iron deficiency anemia

The results of this study revealed that:

- We found 52.5% of children +ve H.pylori stool antigen test 86.7% of children with H. pylori infection had iron deficiency anemia. Association between +ve H.pylori stool antigen test and iron deficiency anemia was statistically significant.

- There were no statistically significant difference in mean age and gender of studied children according to H.pylori infection.

- There were statistically positive significant association between lower father's and mother's education, low scholastic achievement, low socioeconomic status, such as crowded housing or relatively poor water and sanitary systems, and positive H.pylori stool antigen test in studied children.

- There were statistically significant decreased in all anthropometric measurements among children with positive H.pylori stool antigen test compared to the other group which was negative H.pylori stool antigen test.