# SERUM ZINC LEVEL IN ACUTE DIARRHEAL DISEASE AMONG CHILDRENADMITTED IN A TERTIARY CARE HOSPITAL

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### **Abstract**

BACKGROUND AND OBJECTIVE: India is one of the developing countries where children suffer from extremely high levels of malnutrition resulting in high under 5 mortality rates in our country. I did this study to determine the serum zinc level in acute diarrhoea and to prove that serum zinc levels are reduced. The aim of this study is to estimate the serum zinc levels and compare and co-relate it with the diarrhoea. MATERIALS AND METHODS: A cross sectional study was done on 100 children for a period of one year from August 2017 to July 2018, admitted in Andhra Medical College/King George Hospital, Visakhapatnam. Serum zinc levels were measured in all 100 children using calorimetric method.

RESULTS: This study revealed that 30% children had low levels of zinc. The serum zinc levels are reduced in children with longer duration of diarrhoea. Serum zinc level in children with some and severe dehydration were reduced compared with no dehydration children with significant p value. Children with reduced weight and height had reduced serum zinc level and recovery pattern from diarrhoea was also significant. Children from lower socio-economic groups had lower zinc levels.

INTERPRETATION AND CONCLUSION: This study revealed that, there is a correlation between serum zinc level and diarrhoea. Increase in the duration of diarrhoea, leads to lower levels of zinc and thereby delays the recovery period. Lower zinc levels were associated with increased severity of dehydration. Children from lower socio-economic groups had lower zinc level. Reduced zinc level leads to stunted height and reduced weight.

## **Biography:**

M. Jagadeeswara Rao completed PG in the year 2019 at age of 31yrs in Andhra Medical College, Andhra Pradesh.

### **Publication of speakers**

1. Jagadeeswara Rao, Development of Silicon Carbide Interlayers for Plasma Spray Yttria Topcoat on Graphite for High-Temperature Applications, 2021.

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