



## Oral Zinc Supplementation for the Treatment of Acute Diarrhea

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### **Introduction:**

Diarrheal diseases are a serious health problem and important causes of growth retardation and death in the developing world, especially those of prolonged duration. Since diarrhea is constantly found in children with zinc deficiency, very studies supported zinc supplements beneficial on the duration and severity of diarrhea among children. We review the impact of zinc effects on diarrhea in South-West Asia to update the evidences and to assess its effect on the global burden of diarrhea.

### **Materials and Methods:**

We conduct a systematic review through January 2014, for randomized controlled trials relevant to effect of zinc on diarrhea in children. We searched the MeSH terms zinc, acute gastroenteritis and children from various databases of Cochrane Library and PubMed, then clinical trials done in South-West Asia, selected for making written.

### **Results:**

In recent years, several studies have reported the therapeutic effect of zinc supplementation on diarrheal diseases that was beneficial on decreased episode duration, stool output, stool frequency, hospitalization duration. In some countries in West Asia such as Lebanon, Israel, Saudi Arabia and Iran in clinical trials showed a faster improvement in acute gastroenteritis in children less than five years. But in some countries, such as Turkey, this effect was not significant.

### **Conclusions:**

Oral zinc supplementation significantly decreases diarrhea duration and has a greater effect on malnourished children. Zinc supplementation seems to be an appropriate public health strategy, mainly in areas of endemic deficiencies. Global attempts should be increased to support recommended regimen of therapeutic zinc by WHO in all areas.

**Keywords:** Acute Gastroenteritis, Children, Zinc, South-West Asia.

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