

Effect of Zinc Supplementation on Duration of Hospitalization in Tanzanian Children Presenting with Acute Pneumonia

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Summary

Background: Zinc supplementation prevents incident pneumonia in children; however, the effect for pneumonia treatment remains unclear.

Methods: A randomized, double-blind, placebo-controlled trial of zinc supplements (daily 25 mg) adjunct to antibiotic treatment of radiology-confirmed acute pneumonia was conducted among hospitalized children (6–36 months) in Dar es Salaam, Tanzania.

Results: The trial was stopped early due to low enrollment, primarily owing to exclusion of children outside the age range and >3 days of prior illness. Among children enrolled ($n = 94$), zinc supplementation indicated no beneficial effect on the duration of hospitalization (IRR: 0.69; 95% CI 0.45–1.06; $p = 0.09$) or the proportion of children who were hospitalized for <3 days (RR: 0.85; 95% CI: 0.57–1.25; $p = 0.40$) or <5 days (RR: 1.01; 95% CI: 0.83–1.23; $p = 0.92$) (IRRs and RRs >1.0 favor zinc).

Conclusions: Although underpowered, this randomized trial provided no evidence for a beneficial effect of zinc supplementation adjunct to antibiotics for hospitalized children.