



Letter to the Editor

Zinc and vitamin A for prevention of upper respiratory tract infection in children

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I read with great interest the article by Kartasurya *et al.*⁽¹⁾. The authors conclude that Zn combined with vitamin A significantly reduces the percentage of days with upper respiratory tract infections (URTI) in preschool Indonesian children. However, there are a few points in the paper that deserve comment. First, the claimed reduction in the percentage of days with URTI following Zn supplementation (relative risk (RR) 0.88 (95% CI 0.75, 1.02); $P=0.09$) was not actually significant using the conventional threshold of $P<0.05$. Similarly, the claimed significant interactive effect of Zn and vitamin A on URTI episodes (RR 0.94 (95% CI 0.88, 1.01); $P=0.073$) was also not significant. Second, the authors claim that a longer supplementation period would have enhanced the ability to examine both the overall and subgroup effects. However, because baseline Zn status was adequate, and not low, in both groups, it is unlikely that a longer period of supplementation would have benefited the population. The situation might be different if more malnourished and Zn-deficient children were included in the study⁽²⁾. Indeed, one trial that included children with moderate malnutrition and having a low baseline serum Zn level (post-trial Zn level being normal in the intervention group) found an 8% reduction in URTI ($P=0.001$) and 42% reduction in suppurative otitis media ($P=0.002$) in the Zn group, and the effect increased with increased severity of the disease⁽³⁾. Third, the statement by the authors that the smaller effect size for the reduction of URTI in the trial of Kartasurya *et al.*⁽¹⁾ compared to that seen in trials investigating lower respiratory tract infection (pneumonia) is due to variation in aetiology is highly speculative, and no trial of Zn has investigated respiratory infections of different aetiology⁽⁴⁾. In a recent meta-analysis, we found

that Zn supplementation for at least 5 months reduces cold incidence, school absenteeism and prescription of antibiotics in children⁽⁵⁾.

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