

# Zinc Deficiency in Adults with Acute Diarrhea, is It a Public Health Issue?

*Murdani Abdullah*

Division of Gastroenterology, Department of Internal Medicine, Faculty of Medicine University of Indonesia/Dr. Cipto Mangunkusumo General National Hospital, Jakarta

Prevention of diarrhea presented indomitable challenges. A preventive strategy that has received significant interest is zinc supplementation. Existing literatures including quantitative meta-analyses and systematic reviews tend to show that zinc supplementation is beneficial, however evidence to the contrary statement has been augmented.<sup>1</sup>

Demonstrable benefit of preventive zinc supplementation was observed against two of the five diarrhea-related outcomes but the prediction intervals straddled unity. Thus the evidence of preventive benefit of zinc against diarrhea was inconclusive. Continuing efforts are needed to better understand the sources of heterogeneity. The outcomes of zinc supplementation may be improved by identifying subgroups which need the zinc supplementation.

The incidence of diarrhea is still high in Indonesia. The case fatality rates of this disease range between 1 and 2.5%. Nutritional status is the main factor affecting morbidity and mortality diarrhea-associated risk.<sup>2,3</sup> Oto et al, studied the proportions and factors associated with zinc deficiency in acute diarrhea patients.<sup>4</sup> The result of this study revealed an extremely high proportion of zinc deficiency in adult patients with acute diarrhea. Knowledge and skills on the importance of rehydration should be promoted at the primary health care services.

Chronic gastritis is commonly found in the society and decreases work productivity. Renaldi et al conducted a study on the influence of fucoidan in mucus thickness of gastric mucosa in patients with chronic gastritis.<sup>5</sup> Thickness of mucus in the antrum and corpus in patients with chronic gastritis was observed to be thinner compared to normal subjects' thickness. The administration of fucoidan significantly increased the mucus thickness.

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