

protein level, that may be a confounder while interpreting serum zinc level, is to be evaluated in such a study. It is also interesting to know whether deworming was given prior to iron therapy, as the role of parasitic infestation in deficiency is discussed in the presentation. Deworming is essential to break the negative spiral of worm infestation, malnutrition and altered immunity [4].

The dose of iron 2 mg/kg/day and zinc 5 mg/day is suboptimum to treat deficiency state. The authors have not given any explanation for choosing prophylactic dose for treatment. The reference endorsing the selection of 6-8 years and 9-11 years as the age for cultivating inspiration and wisdom and for formative process and reasoning, respectively, as cited in the concluding paragraph is also missing.

**KE ELIZABETH**

*Professor of Pediatrics,  
SAT Hospital, Govt. Medical College,  
Trivandrum 695 011.  
elizake@hotmail.com*

#### REFERENCES

1. Umamaheswari K, Bhaskaran M, Krishnamurthy G, Hemamalini, Vasudevan K. Effect of iron and zinc deficiency on short term memory in children. *Indian Pediatr.* 2011;48:289-93.
2. Beard JL. Iron biology in immune function, muscle metabolism and neuronal functioning. *J Nutr.* 2001;131:5685-795.
3. Bhatnager S, Taneja S. Zinc and cognitive development. *Br J Nutr.* 2001;85:S139-45.
4. Koski KG, Scott ME. Gastrointestinal nematodes, nutrition and immunity: Breaking the negative spiral. *Annu Rev Nutr.* 2001;21:297-321.

#### REPLY

Though data with regards to malnutrition was recorded, it was not described in the article because priority was given to the prime objective of the study which was a correlation between iron and zinc deficiency with memory. Deworming was done prior to start of supplementation of all the students who participated in the study. We had met the parents of the children every week. Parents of 9 children complained that the child had sensation of nausea, and 6 of them gave history of frequent passage of stools. Taking the response into consideration and with the references [1,2] mentioned below, the dose of supplementation was reduced. The reference endorsing the selection of 6-8 years and 9-11 years as the age for cultivating inspiration and wisdom and formative process and reasoning respectively, is Ramesh, *et al* [3].

**K UMAMAHESWARI**

*umamaheswari.g@hotmail.com*

#### REFERENCES

1. Ambruso DR, Hays T, Golderberg NA. Current Diagnosis & Treatment: Pediatrics. Hematological disorder, *Ed.* 19. USA: Mc Graw Hill; 2009.p.811.
2. Kleigman RM, Marcadante KJ, Jenson HB, Behrman RE. Nelson Essential of Pediatrics. 5th Edition. Philadelphia: Saunders; 2006.p.154.
3. Mishra RC, Dasen PR. The influence of schooling on cognitive development: A review of research in India. *In:* BN Setiadi, Supratiknya A, Lonner WJ, Poortinga YH (Eds). Ongoing Themes in Psychology and Culture (Online Ed). Melbourne, FL: International Association for Cross-Cultural Psychology. Available from:www.iaccp.org. Accessed on: July 1, 2011.

## Measles Vaccine *versus* MMR

I read the article "Introduction Strategy of a Second Dose Measles Containing Vaccine in India" [1] with great interest. The move, when enforced, may lead to a lot of confusion in the recommendations between the public and the private sector.

In the private sector, pediatricians are already administering the measles vaccine at 9 months followed by MMR at 15 months and an MMR booster at either 5 years or 9-12 years. In fact, even the routine immunization protocol in Delhi, Puducherry, Goa and Sikkim already use the MMR vaccine as the second dose in the second

year of (life and not the measles vaccine).

I wonder what lead to the recommendation of a second dose of measles vaccine and not MMR as the second dose in the second year. If the entire government machinery had been used to push through MMR as the recommended dose in the second year, it would have lead to a wider protection against more diseases while at the same time achieving a uniformity of recommendations between the private and the public sector. With the new recommendations, if I now have a child coming to me who has already taken 2 doses of the measles vaccine at 9 months and 18 months, I would end up giving him 2 more doses of measles in the form of MMR going by the current recommendations for the MMR vaccine.