Effects of education of the head of the household on the prevalence of malnutrition in children

To the Editor

I read the interesting study by El-Mouzan et al¹ on the effects of education of the head of the household on the prevalence of malnutrition in children. It is wellestablished that the mother's education is grossly linked with the nutritional status of children in developing countries, particularly those residing in rural districts, as they are principally responsible for taking care of their children. The societal and economic shifts over the past decades have expanded the roles that fathers play in their families. A father's involvement is associated with positive cognitive, developmental, and socio-behavioral child outcomes, such as improved weight gain in preterm infants, improved breastfeeding rates, higher receptive language skills, and higher academic achievement.² El-Mouzan et al¹ presented in their study an observational correlation between the father's educational level and nutritional status of children. However, the level of significance of that correlation ought to be statistically tested. Despite that, the observational correlation could be added to the growing body of evidence demonstrating that a father's education is a significant determinant of a child's nutritional status.³⁻⁶ The effect of that determinant would be doubled if both parents are educated. It is worth stressing that education is closely related to a child's health, measured either by nutritional status, or by infant and child mortality. The effect of the father's education on infant and child mortality was found to be approximately one half that of the mother's education. The exact mechanisms through which education acts to affect a child's health are unclear. Better nutrition among children of the more educated has been well documented, but it is unclear as to what extent these effects result from improved knowledge, and to what extent from higher income. The analysis does suggest that income differences cannot explain all the effect, or perhaps even as much as half.7

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Reply from the Author

We thank Professor Al-Mendalawi for his comments on our paper.¹ The letter provides additional literature review on the importance of the father's education on the child's health in general and nutritional status. Actually, it is now thought that the best correlation would be with parental educational level, rather than isolated paternal, or maternal as mentioned in our paper. The suggestion that statistical significance ought to be carried out is well taken. However, such analysis was thought unnecessary to reach the conclusion when for example, in a sample size of 7,390 children, the prevalence of underweight (weight for age <-2 standard deviation) increased from 7.41% for university level to 15.23% in children of illiterate heads of households.

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References

- El-Mouzan MI, Al-Salloum AA, Al-Herbish AS, Qurachi MM, Al-Omar AA. Effects of education of the head of the household on the prevalence of malnutrition in children. *Saudi Med J* 2010: 31: 304-307.
- 2. Garfield CF, Isacco A. Fathers and the well-child visit. *Pediatrics* 2006; 117: e637-645.
- 3. Kikafunda JK, Tumwine JK. Diet and socio-economic factors and their association with the nutritional status of pre-school children in a low income suburb of Kampala City, Uganda. *East Afr Med J* 2006; 83: 565-574.
- Moestue H, Huttly S. Adult education and child nutrition: the role of family and community. *J Epidemiol Community Health* 2008; 62: 153-159.
- Semba RD, de Pee S, Sun K, Sari M, Akhter N, Bloem MW. Effect of parental formal education on risk of child stunting in Indonesia and Bangladesh: a cross-sectional study. *Lancet* 2008; 371: 322-328.
- El Taguri A, Betilmal I, Mahmud SM, Monem Ahmed A, Goulet O, Galan P, et al. Risk factors for stunting among underfives in Libya. *Public Health Nutr* 2009; 12: 1141-1149.
- Cochrane SH, Leslie J, O'Hara DJ. Parental education and child health: intracountry evidence. *Health Policy Educ* 1982; 2: 213-250.