Two-sided nutritional problems among school-aged children in Vietnam

Objective To estimate the prevalence of underweight, overweight and obesity in Vietnamese children and adolescents aged 6–18 years in both urban and rural areas.

Methods A cross-sectional study was conducted in 2006. Data on height and weight of 6354 children living in rural areas and 5280 children in urban areas were used for analysis. The prevalence of underweight/thinness, overweight and obesity was estimated according to the United States Centers for Disease Control (CDC) growth charts and WHO child growth standards (WHO Reference 2007).

Results In urban areas, the prevalence of underweight, overweight and obesity among children and adolescents aged 6–18 years was 9.5%, 21.0% and 3.4% in boys and 10.0%, 9.7% and 1.8% in girls, respectively, based on the CDC cut-offs. In rural areas, the corresponding rates were 26.2%, 1.2% and 0.3% in boys and 20.4%, 0.7% and 0.1% in girls, respectively. Urban children were more likely to be overweight than rural children. Conversely, rural children were more likely to be underweight than urban children.

Conclusions The co-occurrence of overweight and underweight among urban children and adolescents and persistent underweight epidemic among rural peers are the main health concerns in Vietnam. Policy planner should develop appropriate health strategies for urban populations to reduce the rising epidemic of overweight, while also focusing on the needs underweight children. In rural areas, it the government should provide more effective intervention to reduce poverty and improve the nutrition status of rural children.

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MATERNAL VITAMIN D STATUS AND DELIVERY BY CESAREAN

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Introduction Factors which increase risk of delivery by cesarean include older maternal age, obesity, nulliparity, minority status and a prior history of cesarean delivery. All probability less well defined factors exist at least one of which may be nutritional—maternal vitamin D deficiency and insufficiency during pregnancy. We examined the association of circulating levels of vitamin D to risk of cesarean delivery using prospective data.

Methods Circulating maternal 25-hydroxyvitamin D and intact parathyroid hormone at entry to care (13.8±0.17 weeks - mean, SEM) were assayed by HPLC (25-hydroxyvitamin D) and radio-immunoassay (parathyroid hormone) in a cohort of 1153 low income and minority gravidae from Camden, NJ.

Results The prevalence of vitamin D deficiency (19.8%) and insufficiency (50.5%) at entry was high and accompanied by increasing concentrations of parathyroid hormone, a functional indicator of vitamin D status. Risk for primary cesarean, for secondary cesarean, as well as for all deliveries by cesarean was increased approximately twofold for vitamin D deficient women (<37.5 nmol/l) except for primary cesarean delivery where risk also was increased 1.5-fold with levels suggestive of insufficiency (37.5–50 nmol/l). Vitamin D deficiency was linked to indications for cesarean including a twofold