Folic acid awareness among female college students. Neural tube defect prevention

To the Editor

I read with interest the article by Kari JA et al 1 on folic acid awareness among female college students: neural tube defects prevention. Neural tube defects (NTDs) are one of the most common and devastating congenital malformations of human structure that are associated with serious morbidity and mortality. They can be effectively prevented as proved nowadays by maternal periconceptional folic acid supplementation.2-7 Despite the decline in NTDs incidence in the last decade from 1.9/1000 live births (1997-2000) to 0.76/1000 live births (2001-2005) after initiation of flour fortification with folic acid in Saudi Arabia,8 recent studies still show breeding cases of NTDs. The NTDs were detected in 19% of patients younger than 15 years of age with congenital central nervous system (CNS) malformation studied by MRI.9 In a more recent study, lethal congenital CNS malformations including NTDs were detected in 17.4% of perinatal deaths.10 The Kari JA, et al study clearly highlighted the effectiveness of educational programs in increasing awareness of women particularly those within child bearing age on the importance of periconceptional folic acid supplementation in the prevention of NTDs. However, this would be most effective if it is incorporated within the context of a national campaign aimed at providing various educational, statistical, preventive, diagnostic, and therapeutic measures. This requires collaborative efforts tailored by related personnel to successfully combat NTDs.

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Reply from the Author

We agree with the comments of Prof. Al-Mendalawi. A national, public health campaign promoting the use of folic acid in women of child bearing age would be most effective in preventing neural tube defects (NTDs). It is carried out in many countries with a good success rate.11-13 The Dutch Ministry of Health aimed to obtain 70% of Dutch women wanting to become pregnant to use folic acid supplements within 10 years of folic acid campaign in the advised period by 2010.14 They almost achieved their target among the more highly educated women (63%). However, they reported the need for more effort, money, and creativity to achieve the necessary increase from the current level of 31% among women with a lower educational background. Similarly, in China after a national campaign on the importance of folic acid, there was a reduction in NTDs of 85% in the northern region, and 40% in the southern region. There was also a reduction in non-syndromic orofacial clefts. In the United States of America, national campaigns resulted in creative new approaches to increase multivitamin consumption among women of childbearing age.13 No similar experiences from Arab countries were reported. However, there are many activities to promote the use of folic acid by married young ladies who are not using contraceptive bills. Gulf Kids is a charity organization, founded by Dr. Abdulla Soby. It supplies books, leaflets, and websites (www.gulfkids.com/) on NTDs. Nevertheless, they are not as effective as national campaigns promoting the use of folic acid, which we need to organize on a regular basis.

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References


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