Abstract

Few studies have examined the impact of educational interventions on participants' long-term knowledge and use of folic acid for prevention of neural tube defects (NTD). Objective: The objective of this pilot study was to evaluate changes in knowledge and behaviors in a sample of college women one year after such a program. Methods: Female students of a residential college campus voluntarily attended the event, which was advertised to the campus community as a women's health seminar. Participants completed a multiple choice test assessing knowledge of folic acid and NTD and frequency of multivitamin use before and immediately after a 30-minute oral presentation. Following 3 reminder messages sent via email or mail, knowledge and multivitamin use were reassessed 1-month and 12-months post-intervention. Results: Thirty-two college women participated in the educational intervention; 27 (84%) completed the 12-month post-test. At 12 months, statistically significant increases in knowledge from baseline remained for questions pertaining to food high in folic acid (p=0.023); completion of spinal column (p=0.011); and 2 questions on NTD prevention (p=0.044). Increases in knowledge regarding recommended daily allowance of folic acid (p=0.817) and difficulty in receiving adequate folic acid from diet alone (p=0.617) were not statistically significant from baseline. Regular multivitamin use (≥4 times per week) was not statistically significantly increased from baseline (p=0.592). Conclusion: Although it was encouraging that the women retained much of the information learned during the program, it appears that the changes in multivitamin use seen at 1-month were not sustained at 12-months. Further study with larger groups of college women is recommended.

Keywords

Health Knowledge, Attitudes, Practice, Health promotion, Folic Acid, Neural Tube Defects, United States.