



FOLIC ACID AWARENESS AND REASONS FOR/NOT HAVING A DAILY INTAKE IN FEMALES AND MALES OF REPRODUCTIVE AGE

Robin R. Leger, RN, MS, PhD^{1&2} and Kiley J. Carlson, Executive Director²



¹University of Connecticut Health Center, Farmington, CT ~ USA

²Spina Bifida Association of Connecticut, New Britain, CT ~ USA

PURPOSE

A state-wide awareness project was lead by a partnership between the Spina Bifida Association of Connecticut (SBAC) and a University of Connecticut Health Center researcher. Various venues and strategies were chosen to reach individuals of childbearing age with outreach targeted to youth, Hispanic, Asian and immigrant communities. (Approved by UCHC, IRB # 08-206-1).

BACKGROUND AND SIGNIFICANCE

Although folic acid awareness has been conducted throughout the USA over the past two decades, targeting has focused primarily on women receiving prenatal care.

Spina Bifida and other central line birth defects occur during the 21- 28 day of fetal life before most women know they are pregnant.

Fortification of folic acid in breads and cereals to prevent birth defects may not be an effective public health initiative for individuals consuming a traditional Hispanic or Asian diet.

Males are unaware that their diet and other health behaviors contributes to sperm quality and thus can effect the outcomes of their offspring.

DEMOGRAPHICS

Table 1. Participants: Targeting reproductive age group

	Females	Males	Total
Number	377 (74 %)	132 (26 %)	N = 509
Age	Range =13 – 54, Mean = 25.2	13 – 60, Mean= 29.7	Mean = 27 yrs
Have children	88 (23 %)	41 (31.5 %)	129 (25.3 %)
Planning on children	243 (68.2 %)	61 (48.8 %)	304 (59.7 %)
Take multivitamins	141 (38 %)	45 (34.6 %)	186 (36.5 %)

METHODS

Community-Based Participatory Research (CBPR) Methods included:

- 1) Revitalization of the disbanded CT Folic Acid Task Force,
- 2) Teaching and utilizing nursing, medical, and high school/college students for outreach,
- 3) Conducting community-based focus groups to identify strategies, and
- 4) Implementation of a descriptive study and community survey on knowledge of spina bifida, folic acid, and reasons for taking daily vitamin supplements.

Grants to conduct the awareness and surveys were awarded from the National Council on Folic Acid (SBA) and Pfizer.

- Men were added to the study following new information in the literature that folate intake may improve the quality of sperm (Young et al., 2008).
- Surveys and awareness sessions were conducted at 9 college campus, or cultural/community health fairs in CT.
- Free monthly supply of a multivitamin with 500 mcg of folic acid 125% and SBA and CDC folic acid awareness brochures were available.
- A convenience sample of 509 participants; 377 females and 132 males; 74% were born in the USA &
- 26 % were immigrants or foreign students; 3 % from South America, 6% from the Caribbean, 2 % from Europe, and 14 % Asia .
- 49 % were White, 11.4 % Black/AA, 17.7 % Hispanic, and 21 % Asian.
- Main reasons for not taking daily multivitamins included: "Not sure" = 41%; "I get all my vitamins from food" = 25%; "I often forget" = 10%; & "My health care provider hasn't told me to" = 8%.

RESULTS

Only 36.5% took daily multivitamins, primarily for general health. **No men and only 6 women (1.6 %) took vitamins/folate to prevent birth defects !**

Males were statistically less knowledgeable about:

- spina bifida $t = .115, p < .01 **$
- folic acid $t = .203, p < .01 **$
- FA preventing birth defects $t = .210, p < .01 **$
- and less likely to take a daily supplement $t = .093, p < .05 *$

Table 2. Participants' Awareness (Mean score \pm SD out of 100)

	Females	Males	Total
Knowledge about...			
<u>Spina bifida</u>	33.3, \pm 28.2	25.7 \pm 31.2	31.3 \pm 29.3
<u>Folic Acid</u>	48.3 \pm 32.5	32.8 \pm 33	44.3 \pm 33.3
<u>FA Prevention</u>	58.6 \pm 31.2	42.5 \pm 33	54.4 \pm 32.8
Willingness to take			
a <u>daily supplement</u>	58.8 \pm 31	52.1 \pm 33.5	57.1 \pm 31.8

IMPLICATIONS & RECOMENDATIONS

- Many women and men remain unaware of spina bifida and the benefits of daily folic acid most believing their diet is adequate
- However, participants were interested in the education materials (SBA & CDC) and availability of free multivitamins.
- This pilot survey demonstrated that the tool was well received and useful for the target population in community settings.
- Consumer and clinical provider education programs should include folic acid content in curriculum to promote prevention.
- Males need to be educated that their health behaviors may affect their offspring!
- Strategies for individual and couple support for adherence to daily folic acid supplementation is needed .

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