

**EVALUATION OF THE NATIONAL FOLIC ACID
COMMUNICATION CAMPAIGN**

STATUS REPORT

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1. INTRODUCTION

The goals of the National Folic Acid Communication Campaign are to increase awareness about the benefits of folic acid for the prevention of neural tube defects (NTDs) and to increase consumption of folic acid among all women of childbearing age to levels sufficient to prevent the majority of NTDs. While the campaign is targeted toward all women of childbearing age in the United States, distinct audiences are also being targeted, including Spanish-speaking women. Spanish-speaking women in the U.S. have a higher risk of having a pregnancy affected by an NTD compared to other groups in the U.S. In addition, the campaign is focusing on two behaviorally defined target groups: pregnancy contemplators and non-contemplators.

The previously submitted One Percent Evaluation Program Funding Proposal entitled *Evaluation of Targeted Health Communication Messages: Folic Acid & NTDs* (Jan., 1998) presented the background information on the National Folic Acid Campaign and the purpose of the evaluation of that campaign. As described in the funding proposal, the purpose of the evaluation is 1) to assess the potential reach of the folic acid education and outreach campaign via a process evaluation that measures level of exposure to folic acid messages from a variety of channels, and 2) to measure the effects of exposure by surveying women's reported knowledge, attitudes, and behaviors surrounding folic acid and comparing responses among women living in high and low campaign exposure areas. This report presents an update on the process evaluation activities and outcome evaluation activities that will measure changes in knowledge, attitudes, and behaviors. Activities and deliverables are reported on according to the original research questions outlined in the One Percent Evaluation Program Funding Proposal. As mentioned in the previously submitted proposal, the Birth Defects and Development Disabilities Division is conducting this evaluation in conjunction with a contractor, Westat, a company with expertise in the evaluation of health communication campaigns.

2. UPDATE

A. Process Evaluation Activities

1) *To what extent are women potentially exposed to the folic acid campaign through media and non-media sources?*

The purpose of this process evaluation is to measure the potential "reach" of the campaign; that is, to what extent are women being exposed to folic acid messages from a variety of channels, including television, radio, print publications, community outreach and education, and other sources. 58 media markets across the United States were selected to monitor campaign and media coverage related to the campaign. Selection of markets was based on a variety of factors, including where professional media tracking services routinely monitor both English-language and Spanish-language media outlets, geographic distribution, and inclusion of markets that receive funding from CDC for birth defects surveillance.

In addition, two three-month monitoring periods were selected in which to track coverage. The initial three month monitoring period began August 1, 1999 and was chosen because it is shortly after the campaign launch. Near the end of the first monitoring period (October 31, 1999), the second phase of the campaign was launched, and as a result, the second monitoring period encompasses November 1, 1999 through January 31, 2000. Once markets and monitoring periods were selected, information on campaign exposure was and will continue to be collected in three ways: media outlets, non-media sources, and surveys of the target audiences.

a. Media Activities

Tracking of media activities is currently being conducted by Westat to determine campaign exposure levels in the 58 selected markets. Both English- and Spanish-language radio, television, and print public service announcements (PSAs) and news coverage related to the campaign are being monitored. The following sources are being used to track media coverage:

- The Lexis-Nexis Database for English-language print news coverage;
- Burrelle's Press Clipping Service for English- and Spanish-language print news coverage, print campaign PSAs, and print commercial advertisements;

- Video Monitoring Services (VMS) of America, L.P. for English- and Spanish-language radio and television news coverage;
- LCG Bienestar Communications for Spanish-language distribution of radio, print, and television campaign PSAs;
- TVAccess and the March of Dimes for sigma-encoded campaign television PSAs.

All information from the various sources has been collected for the first monitoring period of August 1 – October 31, 1999. Appendix A includes two grids used to record the number of television, radio, and print PSAs, news coverage, and commercial advertisements related to the campaign in each media market. One-percent evaluation funding is being used by Westat to subcontract with all of the above listed organizations to collect this data for the CDC. Westat then analyzes the weekly/monthly reports sent by these subcontractors and produces the summary grids. The first grid in Appendix A contains the number of English-language media hits; the other Spanish-language hits. As the English-language grid in Appendix A shows, there were over 2500 media hits in the 58 markets for this three month monitoring period. Television campaign PSAs encompassed the majority (88%) of these hits. Print news stories, PSAs, and commercial advertisements about folic acid accounted for seven percent of the hits, and television and radio news stories accounted for the remaining five percent of media hits during this monitoring period.

The various media tracking services only monitor Spanish-language media in 23 of the selected 58 markets, however, Appendix A shows that the campaign received almost 450 hits in Spanish during the first three-month monitoring period. As with the English-language coverage, PSAs (both television and radio) accounted for the overwhelming majority (98%) of Spanish-language media hits.

Because broadcast PSAs represent the predominant form of media coverage in English and Spanish, a daypart analysis is being conducted by Westat to determine when the majority of campaign PSAs were broadcast (dayparts are the time periods in a 24-hour day when the PSAs aired). Appendix B contains the daypart analysis, which will be used to help in the selection of high and low campaign exposure markets for the outcome evaluation surveys.

A content analysis is also being conducted by Westat of the news stories related to the campaign. Articles are being content analyzed to examine the types of messages being conveyed (e.g., folic acid prevents neural tube defects, folic acid prevents Down Syndrome, women should take folic acid *before* pregnancy), the accuracy of the news coverage, and the degree to which CDC, National Council on Folic Acid (NCFA) partners, and local activities are mentioned. Appendix C contains a copy of the instrument and information on the articles that have been content analyzed thus far.

The second monitoring period began November 1, 1999 and will continue through January 31, 2000. Media monitoring information is currently being collected from the various tracking services and databases for this time period.

In addition to determining campaign exposure in each of the selected 58 markets, the number of media hits is being used to determine markets with high and low exposure to the campaign. Once these high and low exposure markets are selected, respondents in those markets will be oversampled in the upcoming surveys to examine response differences in terms of knowledge, attitudes, and behaviors related to folic acid and birth defects. Non-media activities are also being taken into account to determine campaign exposure and selection of high and low exposure markets. An update on non-media activities is provided in the next section.

b. Non-Media Activities

The process evaluation is also examining non-media campaign outreach and education efforts by NCFA partners (see Appendix D for a list of NCFA partners), health departments, and others. Information is being collected by Westat on non-media activities such as distribution of campaign materials at health fairs, to WIC clients, women's groups, health care providers, and others; presentations to women or health care providers; and other community-based activities. Appendix E includes a table that Westat is using to record non-media activities that occurred in the 58 selected markets during the first monitoring period (August 1-October 31, 1999).

Information on non-media activities has been collected in several ways by Westat and CDC, including the following:

- Examining CDC’s National Clearinghouse on Folic Acid for materials requests and calling listed contacts to determine outreach activities conducted with Clearinghouse materials (Appendix F contains the telephone questionnaire used by Westat to collect this information);
- Contacting March of Dimes chapters in each of the 58 media markets for information on non-media outreach and education activities (Appendix F also includes the outreach activities questionnaire used by Westat to collect information from March of Dimes chapters); and
- Contacting state folic acid campaign coalitions for community-based activities.

In addition to providing the potential exposure levels of the campaign, both media and non-media tracking is being undertaken by BDDD and Westat to help identify markets with high and low levels of campaign activity so that oversampling of women in those markets can be undertaken for the surveys. An update on those surveys is discussed next.

c. Surveys

In addition to using media and non-media sources to determine campaign exposure, surveys have been designed that include questions to determine respondents’ exposure to campaign messages. Because the surveys are also being used for the outcome evaluation component of the campaign, a discussion of survey progress is discussed in the next section.

B. Outcome Evaluation Activities

1) What is the prevailing knowledge, attitudes, and behaviors about pregnancy, folic acid and birth defects among Spanish-speaking women of childbearing age?

A March of Dimes/Gallup survey on folic acid was translated into Spanish by Westat (with back-translation and testing for cultural specificity), additional questions were added, and a survey of Hispanic women’s knowledge, attitudes, and behaviors regarding folic acid was conducted by Westat in May of 1999, prior to receipt of one-percent evaluation funding (paid for through other BDDD program funding). The random-digit dial survey of 502 Spanish-speaking women ages 18-35 was conducted in New York, Los Angeles, and Miami. Women were asked questions about their multivitamin use, pregnancy intentions, where they get their

health information, and their knowledge of multivitamins/folic acid in prevention of birth defects. Appendix G contains the survey as well as an overview of the results.

Earlier this year, the BDDD prepared and submitted a package to the Office of Management and Budget (OMB) to conduct a follow-up Spanish-language survey in early 2000 (see Appendix H for a copy of the survey) to the baseline survey discussed above. In late November, OMB approval was received and Westat and BDDD anticipate going into the field to survey Spanish-speaking women ages 18-35 in January 2000 (with FY2000 one-percent funding). A random digit dial survey will be administered in cities with large Spanish-speaking populations to ensure adequate number of responses. In addition to probing for knowledge, attitudes, and behaviors related to folic acid and NTDs, the survey includes questions about campaign exposure and questions about women's pregnancy intentions (to allow for comparisons between pregnancy contemplators and non-contemplators). The results of the Spanish-language process evaluation are currently being used to determine which markets will be oversampled for Spanish-speaking populations in the survey. Oversampling is being done so that responses between women in markets with high campaign exposure can be compared to responses of women in market with low exposure to associate campaign exposure with women's knowledge, attitudes, and behaviors surrounding NTDs and birth defects.

2) What do women of reproductive age report as their sources of information about folic acid? What, if any, are the effects of the campaign on knowledge and/or reported behavior related to folic acid? What, if any, are the differences in reports of knowledge and behaviors between (a) high and low campaign exposures, (b) English- and Spanish-speaking populations, and (c) pregnancy contemplators and noncontemplators?

As mentioned in the One Percent Funding proposal, an Expanded Folic Acid Survey will be conducted over three consecutive years. The initial survey has been designed and approved by OMB (see Appendix I) and is expected to be administered in January 2000 (again using FY2000 one-percent approved funding). This survey, like the one for Spanish-speaking women, will probe for knowledge, attitudes, and behaviors related to folic acid and NTDs, campaign exposure and women's pregnancy intentions (to allow for comparisons between pregnancy contemplators and non-contemplators). The results of the English-language process

evaluation are currently being used to determine which markets will be oversampled in the survey.

C. List of Deliverables

To date, Westat has worked in conjunction with the Birth Defects and Developmental Disabilities Division to complete the following deliverables:

- A grid representing the sum total of English-language media hits per each of the 58 markets (Appendix A). This grid includes all media monitoring of the campaign that has been collected for the first tracking period of August 1 – October 1, 1999, including print, radio, and television news, PSA, and advertisement coverage.
- A grid representing the sum total of Spanish-language media hits per market (Appendix A). This grid includes all media monitoring that has been collected for the first monitoring period of August 1 – October 1, 1999, including Spanish-language print, radio, and television news, PSAs, and advertisement coverage.
- A daypart analysis of television campaign PSAs showing what times of day PSAs were broadcast (Appendix B).
- A content analytic instrument being used to analyze radio, television, and print news coverage of campaign messages (Appendix C).
- A grid representing the number of non-media activities, including materials distribution and presentations, in each of the 58 markets (Appendix E).
- Questionnaires used to record non-media activities from March of Dimes chapters, Clearinghouse requestors, and state folic acid campaign coalitions.
- Translation of MOD/Gallup survey into Spanish with added questions (Appendix G). The survey was administered in May 1999 and probed women's multivitamin use, pregnancy intentions, where they get their health information, and their knowledge of multivitamins/folic acid in prevention of birth defects.

- Quantitative and accompanying written analysis of the Hispanic survey from May 1999 with frequencies and selected cross-tabulation for certain variables. Appendix G contains highlights from the survey results.
- Follow-up survey to be used with Spanish-speaking women in early 2000 (Appendix H). The survey probes for knowledge, attitudes, and behaviors related to folic acid and NTDs, campaign exposure and women's pregnancy intentions.
- Initial survey to be used with English-speaking women in early 2000 (Appendix I). The survey probes for knowledge, attitudes, and behaviors related to folic acid and NTDs, campaign exposure and women's pregnancy intentions.

D. Expenditures to Date

All deliverables related to the process evaluation part of the campaign evaluation and the survey preparation part (both English and Spanish) of the evaluation have been received from Westat in a timely fashion. As much as 80% of the one-percent funding received for FY99 has either been expended or is obligated to ongoing data collection and analysis activities being currently conducted by Westat and its various subcontractors. All planned activities related to the FY99 funding of \$249,906.00 have been or are being conducted as planned and described in our approved one-percent evaluation proposal.

E. Request for Additional Monies

The proposed and approved funding for FY2000 is designated for survey data collection activities for the early 2000 and late 2000 telephone surveys of English and Spanish speaking women in our target audience. Having just received OMB approval for these surveys, we are planning to go into the field for full data collection beginning January 10, 2000. BDDD is requesting the FY2000 one-percent approved funding of \$218,240.00 now so that we can transfer the funds into the Westat contract in order for the contractor to begin data collection on January 10. Without new funding, the initiation of data collection could be delayed which would result in our not being out of the field before the Census Data Collection Moratorium (mid-March 2000). The FY2000 funding will also cover the analysis of the two data collections (English and Spanish), as well as the costs of another three-month monitoring period, re-analysis

of the TCEI based on the second monitoring period, and the preparation, implementation, and analysis of the late 2000 English and Spanish follow-up surveys.