

Background

WIC encourages breastfeeding as the best source of infant nutrition and currently earmarks funds for breastfeeding promotion and support activities. However, while a great deal of breastfeeding promotion and support is happening in WIC at both the state and local levels, there has been no systematic effort to evaluate what might work best in the WIC setting. Within this context, the Food and Nutrition Service contracted with Abt Associates Inc. for a breastfeeding intervention design study with the following goals:

- Identify interventions to increase the incidence, duration and intensity of breastfeeding among women participating in WIC; and
- Design an evaluation plan to examine the implementation and effectiveness of these interventions.

After a review of the literature, and in consultation with outside experts and FNS staff, peer counseling was recommended as a promising breastfeeding promotion intervention for implementation in WIC. An experimental design was chosen to provide clear evidence of the intervention's effectiveness. The design would involve randomly assigning pregnant WIC participants in selected sites to one of three groups: high-cost peer counseling, low-cost peer counseling, or a control group, which would receive postpartum support services currently offered by the WIC sites. Each phase of the design study is described below.

Findings

Literature Review

A thorough review of English-language breastfeeding promotion and support

intervention efforts described in articles and reports written since 1990 was conducted. The interventions varied across a number of characteristics including the nature of the intervention, the target group, time period in which intervention was implemented (e.g., prenatal, postpartum), the delivery person or persons, and where the intervention took place. Although the review suggested interventions that have improved breastfeeding outcomes, there were gaps in research evidence, as well as methodological and implementation issues.

Most of the studies that focused on WIC participants were based on two types of interventions: peer counseling and various multifaceted interventions (i.e., interventions with three or more intervention strategies). Twelve peer counseling studies focused on WIC participants, although none of these studies used a methodologically strong design. Eleven of these 12 peer-counseling studies suggested a positive benefit on breastfeeding outcomes, including initiation and duration. Most of the multifaceted interventions with WIC participants were not designed to test the effects of the intervention on breastfeeding. The three multifaceted interventions that included evaluations used designs with methodological weaknesses, and only two of these reported positive intervention effects. Aside from these common intervention types, there were three prenatal education interventions of WIC participants. The two of these prenatal education interventions that had valid research designs found no significant effects of the interventions on breastfeeding outcomes. One with a weak design found an effect on breastfeeding duration.

Two postpartum support interventions involving WIC participants included evaluations with weak designs. One reported increases in breastfeeding initiation, while the other reported an increase in breastfeeding duration. No reports on hospital-based breastfeeding interventions

with WIC populations were identified. Thus, there are only a small number of WIC-based studies that provide a basis for selecting the intervention(s) to be evaluated, and even fewer that used valid evaluation methods.

Peer Counseling Intervention Proposed for Testing in WIC

Based on findings from the literature review, four interventions were selected for consideration by FNS and expert consultants with expertise in breastfeeding promotion and support in WIC, extensive research in maternal and child health issues, and research on breastfeeding interventions with low-income and minority groups. The proposed interventions were those that had some evidence of success based on statistically significant increases in breastfeeding initiation and/or duration, appeared feasible for the WIC setting, had potential to be evaluated using an experimental design, and appeared sensitive to cultural differences or were shown effective with different racial or ethnic groups. Peer counseling was selected as the breastfeeding promotion and support intervention to be tested in WIC.

Evaluation Design for Peer Counseling Intervention

A draft evaluation design and analysis plan for peer counseling interventions was proposed and developed to assess 1) how well the interventions have been implemented and 2) their effectiveness in improving breastfeeding outcomes. The draft evaluation plan was provided to a panel of experts who strongly recommended an experimental design in which sites are selected from among those that volunteer and in which WIC study participants within each site are randomly assigned to one of three groups:

- high-cost peer counseling which might include, for example, one prenatal one-on-one counseling visit, one individual counseling in the hospital, four home visits and weekly phone calls;
- low-cost peer counseling which might include no one-on-one prenatal counseling, but one hospital visit, one home visit and a phone call every two weeks; or
- control group, which would receive existing postpartum support services currently offered by the WIC clinic.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.)

Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write: USDA, Director, Office of Adjudication, 1400 Independence Avenue, SW, Washington, DC 20250-9410; or call (866) 632-9992 (Toll-free Customer Service), (800) 877-8339 (Local or Federal relay), or (866) 377-8642 (Relay voice users) or (800) 845-6136 (Spanish Federal-relay). USDA is an equal opportunity provider and employer.