Research Article

Implementing a WIC-Based Intervention to Promote Exclusive Breastfeeding: Challenges, Facilitators, and Adaptive Strategies

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ABSTRACT

Objective: Understand factors that contributed to the implementation of a successful multicomponent intervention to promote exclusive breastfeeding (EBF) within *Special Supplemental Nutrition Program for Woman, Infants, and Children* (WIC) clinics.

Design: Qualitative study of staff implementers' experiences using implementation status reports, facilitated group discussion immediately after implementation, and WIC administrative data.

Setting: WIC staff from 12 clinics participated in an EBF Learning Community composed of 8 intervention trainings and ongoing support from trainers and peers.

Participants: A total of 47 WIC staff including 11 directors, 20 other administrators, 8 nutritionists, and 6 peer counselors.

Intervention: A WIC-integrated EBF promotion initiative, supported through a Learning Community, composed of prenatal screening, tailored trimester-specific counseling, and timely postpartum follow-up.

Phenomenon of Interest: Challenges and facilitators to implementation within clinics.

Analysis: Iterative qualitative analysis using directed, emergent, and thematic coding.

Results: Implementation experiences were characterized by (1) perceived benefits of implementation, including improved EBF knowledge and counseling confidence among staff; and (2) managing implementation, including responding to challenges posed by clinic settings (resources, routine practices, values, and perceptions of mothers) through strategies such as adapting clinic practices and intervention components.

Conclusions and Implications: Implementation was shaped by clinic setting and adaptive strategies. Future WIC interventions may benefit from formal consideration of intervention fit with local clinic setting and allowable adaptations.

Key Words: WIC, breastfeeding, qualitative research, challenges and facilitators, process evaluation (*J Nutr Educ Behav*. 2017;49:S177-S185.)

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INTRODUCTION

Breastfeeding (BF) is associated with numerous benefits to infant and maternal health[1] and leading public health organizations recommend exclusive breastfeeding (EBF) for about 6 months to maximize health benefits.[2] The *Special Supplemental Nutrition Program for Woman, Infants, and Children* (WIC) prioritizes BF promotion through provision of the enhanced BF food package, BF aids such as breast pumps, as well as BF education and counseling.[3] Despite these coordinated activities, 2014–2015 National Immunization Survey data[4] show that whereas a majority of mothers participating in WIC initiated BF (74.1%), less than 15.7% were EBF through 6 months, which is below both the national rate of 22.3% and the rate among income-eligible non-WIC participants (29.1%). This trend suggests that WIC mothers may face unique challenges maintaining EBF after initiation.

The WIC program is a promising intervention setting given its wide reach and capacity to deliver effective components of successful BF promotion interventions such as lay and professional support, education, and counseling spanning pregnancy and the first year postpartum.[5-7] Although a growing number of interventions to improve

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EBF were conducted with WIC-eligible and low-income populations,[3] few were based within the WIC care setting.[8,9] Integration into the WIC care setting may allow initiatives to build on existing resources[8,9] and produce broader and more sustained benefit.[7]

These findings underline an urgent need for studies that intend to identify challenges and facilitators to integrating EBF promotion interventions within WIC. Implementing programs within organizations is a complex process that involves adoption and support from administrators as well as coordinated and interdependent effort by a variety of organizational staff.[10] Research findings from implementation of health programs in diverse organizational settings highlight the need to explore not only indicators of implementation such as fidelity and reach measures but also organizational factors that shape the implementation process and sustainability within local contexts.[10-12]

In 2014, New York State (NYS) WIC piloted a WIC-based intervention, *You Can Do It* (YCDI), to promote EBF in 12 WIC clinics. *You Can Do It* aimed to enhance promotion of EBF through staff training and support to deliver prenatal screening, individually tailored and trimester-specific counseling, and timely postpartum follow-up to enrolled mothers. An outcome evaluation focusing on EBF at 7, 30, and 60 days demonstrated that the intervention was effective.[13] This study aimed to identify factors that affected implementation of this successful multicomponent intervention within WIC clinics. In particular, this study qualitatively explored challenges and facilitators to implementation using data from staff implementer experiences.

METHODS

Intervention Setting and Design

You Can Do It, an initiative developed by Vermont WIC,[14] aimed to improve EBF among WIC participants by providing training and support for BF promotion protocols[14-17] (Table 1) to supervisory, professional, and paraprofessional clinic staff. *You Can Do It* was implemented in 12 WIC clinics with diverse characteristics across NYS from July, 2014 through October, 2015 (Table 2). These clinics agreed to commit staff time and resources to make changes within clinic systems to support implementation. This study protocol was approved by the institutional review board of the NYS Department of Health.

Central to YCDI implementation in NYS was the formation of a Learning Community,[18] a model for collaborative learning to promote quality improvement within organizations, by the NYS WIC Training Center contractor. The Learning Community brought together staff from participating clinics to learn from intervention trainers, experienced YCDI implementers from Vermont WIC, and the practical experiences of participating peers over an intensive and ongoing intervention training process involving a series of Learning Community Sessions and Action Periods.[18] Each participating WIC clinic established a performance improvement team, referred to here as teams, to represent its clinic in the Learning Community Sessions. Teams were intended to represent supervisory, professional, and paraprofessional staff and were composed of up to 4 members from each clinic (Table 2). Teams attended a total of 8 joint Learning Community Sessions (ie, 2 in person and 6 via webinar) that addressed, for each intervention component, background and practical information, necessary implementation skills, and technical assistance. In Learning Community Sessions, teams developed implementation plans specific to their clinic with guidance from trainers and other peer teams. Teams also discussed implementation progress with one another in Learning Community Sessions. In between each Learning Community Session were Action Periods, in which teams returned to their local clinics to train other WIC staff and carry out planned organizational changes.

Data

The data presented in this paper were provided by staff implementers in 3 ways: (1) clinic progress reports presented by teams to trainers and peers during Learning Community Sessions, (2) facilitated group discussion with a convenience sample of implementing staff after the intervention, and (3) NYS WIC administrative data.

Learning Community Session status reports. Each team presented implementation status reports to trainers and peers at 4 Learning Community Sessions throughout the intervention period (ie, August, 2014, October, 2014, December, 2014, and January, 2015). Status reports addressed implementation challenges, facilitators, and accomplishments. Although all status reports were presented orally at Learning Community Sessions, only 1 (December, 2014) was recorded by intervention trainers and transcribed verbatim. All other status reports were received as written documents.

Follow-up facilitated group discussion. The second set of data was collected in a follow-up facilitated group discussion with implementing WIC staff in December, 2015 immediately after the implementation period. All teams were invited to participate; 22 team members (15 administrators, 5 nutritionists, and 2 peer counselors) from 10 clinics attended. Staff members were placed into 6 groups. Three intervention trainers rotated groups to facilitate discussion of implementation challenges, facilitators, resources, and training needs. Each group created written summaries of their discussion, which were used for this analysis. Trainers then brought the groups together to facilitate discussion as an entire group, asking probing questions to expand written responses and confirm interpretation. Researchers composed field notes during the discussion that were also used during this analysis.

Administrative data. The researchers used administrative data to assemble information about the organizational context of each WIC clinic during the intervention period (October, 2014 to September, 2015). Reviewed data included clinic staffing levels, physical space, and other resources, as well as previous and current BF promotion activities and goals.

Data Analysis

All data were analyzed in text format using Microsoft Word 2016 (Microsoft Corporation, Redmond, WA). All names and locations were replaced with staff titles and location codes. Status reports and administrative data pertaining to a specific clinic were grouped and analyzed before moving on to analysis of the next clinic. In addition,