International Code of Marketing of Breastmilk Substitutes and Promoting and Supporting Exclusive Breastfeeding

New York SUNY Albany School of Public Health
Breastfeeding Grand Rounds
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Vermont WIC Presentation:
“Beyond Initiation to Long-term Breastfeeding Success: Building Knowledge, Support and Confidence with the Vermont WIC Mother-Baby Study”

Goals
• Increase exclusive breastfeeding by 10% at 4 weeks postpartum compared to historical controls.
• Assess WIC’s reputation in the community as credible, effective and sincere partner in breastfeeding promotion and support.

Background
Most Vermont mothers initiated breastfeeding before the study, but attrition was high and early.
• More than 73% of babies born to WIC mothers start out breastfeeding (2009 Pediatric Nutrition Surveillance System).
• One third of WIC mothers supplemented with infant formula by the end of the first week postpartum.

Pregnancy Risk Assessment Monitoring System (PRAMS) data for Vermont:
• The Phase 5 questionnaire (in 2004-2008) included a series of questions on breastfeeding barriers, reasons for stopping breastfeeding and the “Baby Friendly” characteristics of hospitals where each mother delivered.
• The surveys were mailed to a random sample of new Vermont mothers and an oversample of low birth weight mothers at 2 to 6 months after birth. Follow-up of non-respondents by telephone yielded a response rate consistently over 79% for each year from 2004 to 2008.
• PRAMS uses a complex sample design. The un-weighted counts from 2004 to 2006 for women participating in WIC (n=1315) and not participating in WIC (n=1964) represent approximately 7,774 Vermont women participating in WIC and 11,214 Vermont women not participating in WIC.

PRAMS surveillance data:
• A low proportion of WIC and non-WIC moms agree with the statement: “I felt it was the right time to stop breastfeeding”. (21% WIC, 17% non-WIC)

Similar percentages of WIC and non-WIC moms reported milk-supply related reasons for stopping breastfeeding. WIC percentages were
• 11% of WIC mothers reported that baby was not gaining enough weight.
• 38% believed that breast milk alone did not satisfy the baby.
• 37% reported not making enough milk.
Some of the comments moms added hinted at a lack of knowledge about the importance of exclusive breastfeeding on milk supply.

- Understanding this concept after the fact may indicate a lack of prenatal education on supply & demand and fullness cues.

Likewise, both WIC and non-WIC mothers reported reasons for stopping breastfeeding that seemed to reflect a lack of professional support and confidence in breastfeeding skills.

- 27% of WIC mothers reported sore nipples.
- 31% of WIC mothers reported that baby had difficulty nursing.

WIC and non-WIC mothers reported reasons for stopping breastfeeding related to life events:

WIC percentages:
- “Want/Need someone else to feed baby” (20%)
- “Work/School” (16%),
- “Mom got sick” (7%)

Twenty-eight percent of mothers checked “Other” as reasons for stopping. Based on comments mothers wrote on the PRAMS survey, some of the reasons may have included alcohol, drug addiction or treatment, or domestic violence.

WIC mothers checked some reasons for stopping breastfeeding at a significantly (p<0.05) higher rate than non-WIC moms:
- “Baby got sick” (WIC 4% vs. non-WIC 1%).
- “Too many household duties” (WIC 14% vs. non-WIC 8%).
- “Baby was jaundiced” (WIC 11% vs. non-WIC 5%).

PRAMS survey data showed that WIC moms had different hospital experiences than non-WIC moms when responding to questions about whether or not they had experienced the 10 Steps to Successful Breastfeeding.

Compared to non-WIC mothers, mothers in Vermont’s WIC Program were:
- Less likely to report feeding baby only breast milk in the hospital
- More likely to report receiving a gift pack with formula
- More likely to report baby using a pacifier in the hospital

WIC mothers were also less likely to report:
- Baby rooming in
- Breastfeeding their baby in hospital
- Hospital staff helping learn how to breastfeed
- Hospital staff telling mom to feed on-demand
- Hospital giving a phone number to call for breastfeeding help

Self-report data limit the extent of conclusions that can be drawn, but it is clear that there are perceived differences in support received – and possibly real differences in the support offered to breastfeeding moms in WIC versus those not enrolled in WIC.
Vermont WIC Mother-Baby Study

The intervention was implemented in 3 of 12 local health offices which combined screening, targeted counseling and social marketing to better support WIC mothers to reach their breastfeeding goals.

The intervention was designed to emphasize
- The importance of social and professional support
- Breastfeeding knowledge
- Enough confidence in their breastfeeding skills to get through the first postpartum weeks.

Alexis Avery et al. Confident Commitment is a Key Factor for Sustained Breastfeeding. Birth 36:2 (2009)
- Her confidence in the process of breastfeeding – a belief that her body was made for this and the biology works.
- Her confidence in her ability to breastfeed – the belief or firmly stated intention that “I’m going to breastfeed”, rather than “I think I want to try, but…”
- Her commitment to making it work – knowing and understanding that some challenges lie ahead and believing she will overcome the challenges.


Confident Commitment / Breastfeeding Assets
- Building a mother’s “confident commitment” seems fundamental to reaching goals for duration.
- Breastfeeding is both “natural” and learned, and requires knowledge, resources, strategies, and support to overcome barriers.
- WIC can help prepare mothers for their breastfeeding experience and provide long term support.
- To increase breastfeeding exclusivity and duration: keep mothers breastfeeding past the first postpartum weeks.

2009 – Overhaul of WIC’s food packages provides an opportunity to:
- Strengthen WIC’s increased supports for exclusive breastfeeding
- Change the perception of WIC from “the place for formula” to “the place to go for quality breastfeeding support and services”

Vermont WIC’s Goal:
- Strengthen staffs’ assessment skills
- Assure referrals to community partners with the necessary skills and knowledge to provide evidence-based support
- Market the higher value food benefit
- Improve our breastfeeding support system

Vermont’s project involved 2 inter-related interventions, each with an outcome goal for improving long-term exclusive breastfeeding in WIC mothers and their babies.
- “You Can Do It”
  - Goal One: Increase exclusive breastfeeding by 10% at 4 weeks post-partum.
• “WIC Can Help”
  o Goal Two: Improve WIC’s reputation in the community as a sincere and creditable partner in breastfeeding support

You Can Do It
• The intervention design included support from WIC breastfeeding peer counselors.
• Expert panel of staff from those 3 offices with peer counselors worked together to develop a protocol that could realistically be implemented with the time and staffing available.
• At their first prenatal WIC visit, women were invited to enroll in the “You Can Do It” project. They could receive up to 3 contacts during their pregnancy – roughly the first, second and third trimester – in addition to scheduled peer counselor contacts.
• Eligibility criteria:
  o Planning to breastfeed or was unsure and wanted more information.
  o Age 18 or older.
  o Read/speak English as their primary language.
• Formula feeding moms were excluded from the study and comparison groups.
• WIC staff
  o Promoted the 2009 exclusive breastfeeding food packages for mothers and babies
  o Screened for breastfeeding attrition risks
  o Targeted counseling to increase
    ▪ Breastfeeding knowledge
    ▪ Identification of support networks
    ▪ Confidence
  o Offered social marketing materials to address common myths and barriers
• Post-partum mothers could receive up to 3 more contacts in the first 4 to 6 weeks, in addition to regular peer counselor contacts.
• Staff assessed mom’s knowledge regarding signs that her baby was getting enough to eat
• Second screening done by the WIC peer counselors to
  o Assess for risk of early weaning
  o Offer referrals to community lactation supports
Exclusively breastfeeding moms received an immediate food package upgrade. (Vermont is the last state with home delivery of most WIC foods.)
• Compared to historical control mothers, more You Can Do It moms were likely to:
  o Have completed high school (93% versus 86%)
  o Be pregnant for the first time (43% versus 36%)
  o State they planned to breastfeed

• Compared to study moms, more control moms were likely to:
  o Have previous breastfeeding experience.
  o Or state they were “not sure” about breastfeeding and wanted more information.

• Number of Contacts
  o Increasing the number of contacts resulted in increased rates of exclusive breastfeeding.
  o These results are statistically significant at all time points.

Breastfeeding Attrition Prediction Tool (BAPT)
• The BAPT tool was developed by Jill Janke in 1994; later modified by Sara Gill and translated into Spanish.
• Note: The modified BAPT tool is not available online; contact Sara Gill at gills@uthscsa.edu.
• During the prenatal certification visit, study participants were screened using the BAPT tool.
• BAPT is a validated tool that aligns closely with the concept of confident commitment and the assets approach to improving health choices.
• Vermont WIC made further modifications to the tool to measure risks specifically in the domains of knowledge, support and confidence.
• Moms were asked their opinion on 27 statements about breastfeeding.
  o Knowledge – of how breastfeeding works, what to expect
  o Support – from friends, family and professionals
  o Confidence – in the biology of breastfeeding, that breastfeeding is a skill that can be learned
Knowledge statements included:

1. Breastfeeding is more convenient than formula feeding
2. Breast milk is healthy for the baby.
3. Breast milk is more nutritious than infant formula.
4. Breastfeeding makes your breasts sag.
5. Breastfeeding makes you closer to your baby.
6. Breastfeeding makes returning to work more difficult.
7. Breastfeeding is more economical than formula feeding.
8. When you breastfeed you never know if the baby is getting enough milk.
9. Mothers who formula feed get more rest than breastfeeding mothers.
10. Breastfeeding is more time consuming than formula feeding.
11. Breastfeeding is messy.
13. Breastfeeding helps you bond with your baby.
14. Breastfeeding is better than formula.

Support items asked how individuals close to mom thought she should feed her baby:

15. The baby's father
16. Her mother
17. Mother-in-law
18. Sister
19. Her doctor

Confidence items assess her perceived behavioral control with statements such as:

20. I have the necessary skills to breastfeed.
21. I am physically able to breastfeed.
22. I know how to breastfeed.
23. I am determined to breastfeed.
24. I won’t need help to breastfeed.
25. Breastfeeding is easy.
26. I am confident I can breastfeed.
27. I can learn how to breastfeed.

WIC Can Help

- Vermont WIC adopted the “detail visit” model used by formula and drug reps.
- Local WIC staff visited practices over the noon hour and gave a presentation outlining:
  - The need for better breastfeeding support.
  - How WIC supports breastfeeding.
  - How practices could benefit by partnering with WIC to support breastfeeding moms and babies.
- WIC staff prepared lunch using foods from the exclusive breastfeeding WIC food package.
- Providers were offered:
  - Social marketing materials developed for the study.
  - Professional reference texts.
Opportunity for CME credits if a follow-up session was scheduled.
- Local staff made a second visit to practices to deliver their resources.
- Practices could choose from any of the breastfeeding modules in the *Increasing Breastfeeding Success* curriculum developed by the Physician’s Lactation Education Collaborative of Washington.
  - Several residents from our university-affiliated hospital and local “provider champions” presented these sessions.

Pre- and post-surveys and interviews were conducted with physicians. At follow-up, compared to baseline there was:
- A significant increase in favorable opinions of the WIC food benefit.
- Increased agreement that WIC helps moms meet their breastfeeding goals.
- A decreased perception that WIC supports formula feeding more than breastfeeding.

### Social Marketing Materials
- Goal: Develop a communication strategy for promoting WIC’s core breastfeeding services and values to mothers and health care providers.
- Unifying theme: Knowledge + Support + Confidence = Success.
- Providers participating in *WIC Can Help* ordered patient materials to distribute to all mothers in their practice.
- Available on Vermont Department of Health website: [www.healthvermont.gov/youcandoit](http://www.healthvermont.gov/youcandoit)

### Results
- Project goal: Increase long-term exclusive breastfeeding rates by 10% – Goal met and exceeded
- 281 moms agreed to participate in the study; 256 remained in the study at the time of their baby’s birth.
Significantly more mothers who participated in *You Can Do It* were exclusively breastfeeding at 4 weeks, 3 months and 6 months, compared to mothers in the control group. Percent Increase:
- 4 weeks – 16%
- 3 months – 21%
- 6 months – 18%

The control group for this analysis included mothers from our 3 study offices who were enrolled in WIC BEFORE the new food package took effect in October 2009, and who met the same eligibility requirements as our study moms.

Because moms who declined to enroll in the intervention were also WIC participants, we were able to compare outcomes for moms who participated in the study and for moms who declined.

Compared to moms who declined to participate in the study, more study moms exclusively breastfed at:
- 4 weeks (55% vs. 42%),
- 3 months (43% vs. 28%)
- 6 months (34% vs 21%)

**Impact of the 2009 Food Package Policy**
- Our STUDY moms were recruited after the policy change in 2009.
- Our CONTROL group moms were historical and were WIC participants prior to 2009.
• To measure the effect of the food package policy alone, we looked at NON-STUDY SITE moms before and after the 2009 food package.

• We found that more moms exclusively breastfed at 1, 3 and 6 months postpartum. The increase was:
  - 11% at 4 weeks
  - 9% at 3 months
  - 8% at 6 months

- The food package change alone also increased exclusive breastfeeding in our 3 study districts:
  - 10% increase at 4 weeks
  - 11% increase at 3 months
  - 11% increase at 6 months

• Note: Before the 2009 Food Package change, exclusive breastfeeding was LOWER in STUDY sites compared to NON-STUDY sites. We were aware of this as districts with lower breastfeeding rates were given priority for peer counseling programs.
• Survival analysis shows exclusive breastfeeding in the 3 groups over time. Each drop in the line shows a mom or group of moms stopping exclusive breastfeeding during that postpartum week.
  - Pink shows ENROLLED in You Can Do It + 2009 FOOD PACKAGE
  - Green shows 2009 FOOD PACKAGE alone
  - Orange shows Before 2009 FOOD PACKAGE
• The group that only received the food package (green) includes declines and the non-study sites

![Exclusive Breastfeeding Over Time (Vermont)](chart)

**Recommendations**
- Our recommendations going forward can be applied by many different entities in addition to WIC. Recommendations include:
  - Local health care providers, WIC, and other community supports meet and collaborate regularly to share resources and strengthen professional breastfeeding supports for moms and babies.
  - Monitor state and local breastfeeding data.
  - Assure all women are aware of maternity care best practices that support breastfeeding.

**WIC Program Recommendations**
- **1st Trimester:**
  - Screen moms for breastfeeding challenges early in pregnancy, and counsel them to talk with family, friends and health care providers about their breastfeeding goals.
- **2nd Trimester:**
  - Use screening results to provide each mom with highly individualized, targeted counseling to help her meet her personal breastfeeding goals.
- **3rd Trimester:**
  - Teach moms about the hospital practices that support breastfeeding.
- **Postpartum:**
  - Provide early post-partum support as soon as mom and baby leave the hospital, and
  - Refer moms to community lactation specialists, such as WIC breastfeeding peer counselors.
Web Resources

- Vermont WIC implemented this model in our 9 remaining local health offices in January 2014 and we are sharing the project resources nationally.
- Vermont Department of Health: [www.healthvermont.gov/youcandoit](http://www.healthvermont.gov/youcandoit)
  - All social marketing materials – Breastfeeding checklists, comic (download PDF files)
  - Video clips - *What Breastfed Babies Do: Confidence Building Tips*
  - Executive Summary and Final Report
  - Selected social marketing materials, including comic, breastfeeding checklists, and door hangers

Birth and Beyond Vermont

*Birth and Beyond: 10 Steps to Empower Mothers and Nurture Babies*

- Maternity care practices improvement project.
- 16-hour breastfeeding training for hospital and birthing center staff.
- Fulfills staff education requirement for Baby Friendly.
  - Presentation platform
  - Complete speaker notes
  - Hyperlinked bibliography
  - Resources
  - CEU templates

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References


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