RESEARCH UPDATE FROM CALIFORNIA: MAKING THE CASE FOR WIC

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PHFE WIC
BUILDING A STRONG CASE FOR WIC

- WIC data: Proof that WIC works
- WIC successfully promotes breastfeeding
- Breastfeeding significantly reduces rates of childhood obesity
  - (WIC reduces obesity!)
- Breastfeeding may even be protective against sugar sweetened beverage consumption
We all collect a lot of data! While there are some differences in what we collect, we all have a common set of data elements (Federal Minimum Dataset).

Primary use is for administrative purposes, but we are all sitting on goldmines of health surveillance information.

WIC serves 50% of ALL infants in the US, so we are likely to be the only shop in town that can provide good data on such a large population of low-income families.

Let me share with you two examples of the good data we all collect...
We conducted a validation study of WIC height and weight measurements of children and WIC does an EXCELLENT job!

We compared WIC measurements of 287 2- to 5-year old children with “gold standard” research protocol measurements.

CONCLUSION: Height, Weight and BMI collected by WIC staff are sufficiently accurate for surveillance and research.

Intraclass correlations measuring agreement between WIC and research protocol for height, weight and BMI were .96, .99 and .93.

The short answer: YES! Infant food package type is an EXCELLENT indicator of actual breastfeeding behavior.

Surveyed ~2000 postpartum mothers by phone in August 2010 about feeding behavior at home. Linked their survey data to their food package issuance data in August 2010.

89% of mothers taking the fully breastfeeding package were fully breastfeeding. 91% of mothers taking the full formula package were fully formula feeding.

Whaley, Koleilat & Jiang (2012). WIC infant food package issuance data are a valid indicator of infant feeding packages. Journal of Human Lactation. Funded by the California WIC Program.
Linking efforts across states to examine rates of obesity and breastfeeding throughout the nation.

Developing a BMI or breastfeeding surveillance system, which enables tracking of intervention impact (e.g. impact of the food package change).

In addition to elements like Ht/Wt/BMI and breastfeeding data, most of us collect:
- Demographic information
- Gestational weight gain & interpregnancy interval
- Birthweight and prematurity
WIC data: Proof that WIC works
TALKING POINT 2

WIC successfully promotes breastfeeding
In Los Angeles County...

- WIC serves over 600,000 individuals/month in 90+ WIC Centers.
- WIC serves 91% of the eligible infants & 69% of all infants born in LAC.
- 81% Hispanic, 9% African-American, 5% White, 5% Asian.
- 7 local agency WIC Programs in LAC - PHFE is largest (caseload > 300,000).
Breastfeeding Rates at Enrollment

Percent of 5000 to 6000 enrollments per month

Fully Breastfeeding

2007.10-2010.08
Breastfeeding Rates at Enrollment

Combination Feeding

Fully Breastfeeding

Fully Breastfeeding at 2 Months

- Apr 07: 12.3%
- Mar 08
- Apr 08: 13%
- Mar 09
- Nov 09: 20%
- Sept 10
Fully Breastfeeding at 6 Months

- 8.4% • Apr 07 • Mar 08
- 8.5% • Apr 08 • Mar 09
- 14.1% • Nov 09 • Sept 10
SIGNIFICANT INCREASES IN BF INITIATION AND DURATION IN CA WIC

- Increase started BEFORE the actual change to the food package.

- California statewide Healthy Habits Campaign
  - www.wicworks.ca.gov - search “Healthy Habits Campaign”

- No routine issuance of formula to breastfeeding mothers in the first month

- Changed the “norm” for front line staff and gave them the tools to be successful.

WIC successfully promotes breastfeeding
Breastfeeding significantly reduces childhood obesity (WIC reduces obesity)
BREASTFEEDING SIGNIFICANTLY REDUCES CHILDHOOD OBESITY

What WIC data do we have to support this?
- 80,000+ infants on WIC from birth to 4+ years old
- They have the same Individual ID for four + years
INITIATION OF FULL BREASTFEEDING = 23.6% REDUCTION IN OBESITY AT AGE 4

*Package issuance at infant enrollment into WIC
For every additional month of ANY breastfeeding:
- 2% reduction in obesity at age 4.

For every additional month of FULLY breastfeeding:
- 4% reduction in obesity at age 4.
5 Year View of Exclusive BF at Enrollment
Breastfeeding significantly reduces childhood obesity (WIC reduces obesity)
Breastfeeding is protective against later consumption of Sugar Sweetened Beverages
IS BREASTFEEDING PROTECTIVE AGAINST SUGAR SWEETENED BEVERAGES (SSBs)?

- Growing literature on the contribution of SSBs to obesity.

- Limited research on SSB intake among young children < 5.

- Limited understanding of the role of SSBs in obesity of young children.
5000-6000 participants per survey answered questions on topics such as:

- food and SSB intake
- breastfeeding practices
- household food security
- child care and preschool utilization patterns
- home literacy practices
- maternal emotional well-being
- developmental concerns of early childhood

Survey instruments available at www.phfewic.org
On an average day, about how many sodas, such as Coke or Mountain Dew, or sweetened drinks, such as Gatorade, Red Bull or Sunny Delight, does <child’s name> drink? Do not include diet sodas or sugar-free drinks.
DAILY SSB CONSUMPTION BY AGE (%)

- Age 6m - 2y: 29%
- Age 3-5 years: 43%
Study Goal:

To examine the separate and combined effects of breastfeeding in the first year of life and SSB intake at ages 2-4 on the prevalence of obesity in early childhood.

Sample:
1483 Hispanic children ages 2-4 from 2008 LAC WIC survey.

Variables:
BF in first year, SSB intake at 2-4, Obesity at 2-4
### OBESITY BY BF STATUS AND SSB INTAKE
(N=1483)

<table>
<thead>
<tr>
<th>BF</th>
<th>%</th>
<th>%Obese</th>
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<tbody>
<tr>
<td>&lt;1 week</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>1-&lt;6m</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>6-&lt;12m</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>12m+</td>
<td>36%</td>
<td>11%</td>
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<table>
<thead>
<tr>
<th>SSB</th>
<th>%</th>
<th>%Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/day</td>
<td>57%</td>
<td>11%</td>
</tr>
<tr>
<td>1/day</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>2+/day</td>
<td>18%</td>
<td>18%</td>
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***BF status was NOT related to SSB intake***
CONCLUSIONS

- Children breastfed for 12+ months had 45% lower odds of obesity at age 2-4.

- Children consuming no SSBs had 31% lower odds of obesity at age 2-4.

- The combined effect of 12+m BF and no SSB intake conferred a >60% reduction in odds of obesity at age 2-4.
SSB intake affected obesity prevalence only in children who were breastfed less than 12 months.

Breastfeeding is protective against later consumption of Sugar Sweetened Beverages
VISIT WWW.CALWIC.ORG
2012 NWA WIC RESEARCH NEEDS ASSESSMENT

Overview

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a national program that provides nutrition education and assistance to families in low-income, nutritionally at-risk populations. The program is designed to improve the health and well-being of pregnant or breastfeeding women, infants, and children. The 2012 NWA WIC Research Needs Assessment was conducted to identify research needs and priorities for the WIC program.

As the nation’s premier public health nutrition program, WIC is a cost-effective, sound investment—insuring the health of our children.

WIC’s Mission
Providing leadership to promote quality nutrition services, advocating for services for all eligible women, infants, and children, and ensuring the sound and responsible management of WIC.

1. Improved Maternal Health During Preconception and Interconception Periods

It is becoming increasingly evident that nutrition during the preconception period—the time period immediately prior to conception and the few days and weeks following conception—can impact placental and embryonic development with critical lifelong implications. While WIC does not serve women prior to their first pregnancy, WIC serves millions of women between pregnancies. This represents an opportunity to optimize women's nutrition and weight status prior to conception. Research is needed to examine the impact of WIC participation during an earlier pregnancy on subsequent health and nutritional status of mothers and birth outcomes.

Recommendations

The intent of the 2012 WIC Research Needs Assessment is to highlight areas that our community feels are of high research priority due to their significant potential to provide essential information needed to impact the women, infants, and children served by the program.

2012
Please direct all questions to NWA at 202.212.5400.
TOMORROW: Walk over to Congress and build your strong case for WIC!

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THIS YEAR: Let’s work together to continue to provide an evidence base for WIC.

- We will continue our efforts in California.

- Consider partnering with the NWA Evaluation Committee. Let’s join forces and link our analytical efforts across states and regions.

- **Participate!** FNS has funded a number of very important studies for the WIC community and I urge you to participate when you are invited.
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I WELCOME YOUR IDEAS

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www.phfewic.org