State of Breastfeeding in Minnesota

Perinatal Hospital Leadership Summit
Earle Brown Heritage Center
May 7, 2013

Edward Ehlinger, MD
Commissioner of Health
Historical Perspective

Dr. Julius Parker Sedgwick
Chair, Department of Pediatrics
University of Minnesota, 1912

Photo Courtesy of University of Minnesota Archives.
Dr. Sedgwick started a program of home nurse visits to promote exclusive breastfeeding in 1919

Encouraged 1:1 lactation help for moms rather than advertising campaign and posters

Significant improvement in breastfeeding initiation and duration, 72% at 9 months

20% decrease in infant mortality

Breastfeeding and human milk are the normative standards for infant feeding and nutrition. Given the documented short- and long-term medical and neurodevelopmental advantages of breastfeeding, infant nutrition should be considered a public health issue and not only a lifestyle choice.

AAP 2012 Breastfeeding Policy Statement: PEDIATRICS Volume 129, Number 3, March 2012 e827
Risks of Not Breastfeeding

Excess Risk Associated with Not Breastfeeding (%)

- Otitis Media: 100
- Eczema: 47
- Diarrhea and vomiting: 178
- Asthma (with FH): 257
- Asthma (no FH): 67
- Childhood obesity: 35
- Type 2 DM: 32
- ALL: 64
- AML: 23
- SIDS: 18
- NEC: 56
- Breast Cancer: 138
- Ovarian Cancer: 4
- Other: 27

Adapted from Surgeon General’s Call to Action.
http://www.surgeongeneral.gov/topics/breastfeeding/
Preventing Obesity Begins in Hospitals: by Supporting Breastfeeding

- Childhood obesity epidemic
- 1 in 5 preschoolers are overweight or obese
- Breastfeeding helps prevent obesity
- Babies not breastfeed – 30% higher risk obesity
- In US 75% babies start breastfeeding
- By hospital discharge (at 2–4 days of age) less than half of babies are exclusively breastfeeding
- At 6 months – only 44% of babies in US are breastfeeding
- Hospital Support for Breastfeeding with Baby Friendly
  - helps moms and babies get off to a good start
  - Increases BF rates at discharge and after

Economic Benefits of Breastfeeding

If 90% of mothers exclusively breastfeed for 6 months

- Save $13 billion dollars per year
- Prevent 911 deaths


http://pediatrics.aappublications.org/content/125/5/e1048.full?sid=99ac55d1-ba94-44e8-aa70-d07a4bc54ca3
# Percentage of Mothers Initiating Breastfeeding

<table>
<thead>
<tr>
<th>Percent</th>
<th>National</th>
<th>Minnesota</th>
<th>Healthy People 2020 Goal</th>
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</thead>
<tbody>
<tr>
<td>Initiation</td>
<td>75%</td>
<td>78%</td>
<td>82%</td>
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Percentage of Mothers Continuing to Breastfeed

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>Minnesota</th>
<th>Healthy People 2020 Goal</th>
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</thead>
<tbody>
<tr>
<td>6 months</td>
<td>47.2%</td>
<td>53.8%</td>
<td>60.6%</td>
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<tr>
<td>12 months</td>
<td>25.5%</td>
<td>29.2%</td>
<td>34.1%</td>
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Percentage of Mothers Exclusively Breastfeeding

<table>
<thead>
<tr>
<th></th>
<th>National</th>
<th>3 months</th>
<th>36.0%</th>
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</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>33.5%</td>
<td>6 months</td>
<td>16.1%</td>
</tr>
<tr>
<td>Healthy People 2020 Goal</td>
<td>46.2%</td>
<td>6 months</td>
<td>25.5%</td>
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Percentage of Breastfed Infants Given Formula Within the First Two Days of Life

<table>
<thead>
<tr>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>0%</td>
<td></td>
<td>5%</td>
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<tr>
<td>5%</td>
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<td>10%</td>
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<td>10%</td>
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<td>20%</td>
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<tr>
<td>20%</td>
<td>24.6%</td>
<td>17.5%</td>
<td>14.2%</td>
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<tr>
<td>25%</td>
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<tr>
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Formula at 2 days

Maternity Practices in Infant Nutrition and Care in Minnesota — 2011 mPINC Survey

This report provides data from the 2011 mPINC survey for Minnesota. It describes specific opportunities to improve mother-baby care at hospitals and birth centers in Minnesota in order to more successfully meet national quality of care standards for perinatal care.

Breastfeeding is a National Priority

Breastfeeding is associated with decreased risk for infant morbidity and mortality as well as maternal morbidity, and provides optimal infant nutrition. Healthy People 2020 establishes breastfeeding initiation, continuation, and exclusivity as national priorities.

Changes in Maternity Care Practices Improve Breastfeeding Rates

Maternity practices in hospitals and birth centers can influence breastfeeding behaviors during a period critical to successful establishment of lactation. Abundant literature, including a Cochrane review, document that institutional changes in maternity care practices to make them more supportive of breastfeeding increase initiation and continuation of breastfeeding.

Breastfeeding Support in Minnesota Facilities

<table>
<thead>
<tr>
<th>Strengths</th>
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<tr>
<td>Availability of Prenatal Breastfeeding Instruction</td>
<td>Most facilities (98%) in Minnesota include breastfeeding education as a routine element of their prenatal classes.</td>
<td>Pre-natal education about breastfeeding is important because it provides mothers with a better understanding of the benefits and requirements of breastfeeding, resulting in improved breastfeeding rates.</td>
</tr>
<tr>
<td>Documentation of Mothers’ Feeding Decisions</td>
<td>Staff at 99% of facilities in Minnesota consistently ask about and record mothers’ infant feeding decisions.</td>
<td>Standard documentation of infant feeding decisions is important to adequately support maternal choice.</td>
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<table>
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<tr>
<th>Needed Improvements</th>
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<tr>
<td>Appropriate Use of Breastfeeding Supplements</td>
<td>Only 32% of facilities in Minnesota adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water.</td>
<td>The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) guidelines for maternal care recommend against routine supplementation because supplementation with formula or water makes infants more likely to receive formula at home and stop breastfeeding prematurely.</td>
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<tr>
<td>Inclusion of Model Breastfeeding Policy Elements</td>
<td>Only 56% of facilities in Minnesota have comprehensive breastfeeding policies including all model breastfeeding policy components recommended by the Academy of Breastfeeding Medicine (ABM).</td>
<td>The ABM model breastfeeding policy elements are the result of extensive research on best practices to improve breastfeeding outcomes. Facility policies determine the nature of care that is available to patients. Facilities with comprehensive policies consistently have the highest rates of exclusive breastfeeding, regardless of patient population characteristics such as ethnicity, income, and payer status.</td>
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<tr>
<td>Adequate Assessment of Staff Competency</td>
<td>Only 80% of facilities in Minnesota annually assess staff competency for basic breastfeeding management and support.</td>
<td>Implementing comprehensive assessment of staff training and skills for basic breastfeeding management and support establishes the foundation for quality infant feeding care. Adequate training and skills assessment are critical to ensure that mothers and infants receive care that is consistent, evidence-based, and appropriate.</td>
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<tr>
<td>Use of Combined Mother/Baby Postpartum Care</td>
<td>Only 20% of facilities in Minnesota report that most healthy full-term infants remain with their mothers for at least 33 hours per day throughout the hospital stay.</td>
<td>Mothers and infant contact during the hospital stay helps establish breastfeeding and maintain infant weight, temperature, and health. Rooming-in promotes breastfeeding, learning opportunities and duration and quality of maternal sleep, and reduces supplements/feeds.</td>
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Every two years, CDC administers the national Maternity Practices in Infant Nutrition and Care (mPINC) survey to all hospitals and birth centers in the U.S. that provide maternity care. Data from this survey can be used to establish evidence-based, breastfeeding-supportive maternity practices as standards of care in hospitals and birth centers across the U.S. Improved care will help meet Healthy People 2020 breastfeeding objectives and will help improve maternal and child health nationwide.

CDC survey of all birth hospitals completed every two years.

89% of MN hospitals completed survey

Provides actions for establishing evidence-based practices in hospitals and birth centers to increase breastfeeding initiation and duration.
Percentage of Babies Born in Hospitals that Provide Recommended Care for Lactating Mothers and Babies

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<tbody>
<tr>
<td>0%</td>
<td>6.2%</td>
<td>4.1%</td>
<td>8.1%</td>
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Percentage of MN Hospitals Reporting Supplemental Feedings and Discharge Practices

- Rarely Provide Supplemental Feedings to Breastfed Infants: 30%
- No Water or Glucose Water Used: 62%
- No Formula Given in Discharge Packs: 44%
- Breastfeeding Support Part of Discharge Plan: 33%
Percentage of MN Hospitals Reporting Staff Training Practices in Breastfeeding Management and Support

- New Staff: 5%
- Current Staff: 15%
- Staff Trained in Past Year: 32%
- Annual Assessment of Staff: 22%
Breastfeeding and Working: Minnesota Law 181.939

Le Sueur County Public Health Lactation Room

NURSING MOTHERS.

- An employer must provide reasonable unpaid break time each day to an employee who needs to express breast milk for her infant child. The break time must, if possible, run concurrently with any break time already provided to the employee.

- The employer must make reasonable efforts to provide a room or other location, in close proximity to the work area, other than a toilet stall, where the employee can express her milk in privacy.
Breastfeeding Initiation In Minnesota WIC

Breastfeeding Initiation
Among Minnesota WIC Participants

Breastfeeding Initiation by Race/Ethnicity in Minnesota WIC

Minneapolis WIC Breastfeeding Initiation
by Race/Ethnicity

Healthy People 2010
Healthy People 2020

American Indian NH
Asian NH
Black/ African–American NH
White NH
Multiple Races NH
Hispanic

Formula Introduction in the Hospital Decreases Breastfeeding Duration in Minnesota WIC Infants

- 50% of Minnesota WIC infants received formula while in the hospital.

- Infants fed formula in the hospital were 144% more likely to have stopped breastfeeding by three months than those with no formula in the hospital.

Breastfeeding Duration For Women Initiating Breastfeeding in Minnesota WIC

Breastfeeding Duration in Minnesota WIC
Participants Who Initiated Breastfeeding

- 6 or more weeks
- 6 or more months
- 12 or more months

Breastfeeding Duration at Six Months for Women Initiating Breastfeeding in Minnesota WIC by Race/Ethnicity

- American Indian NH
- Asian NH
- Black/African-American NH
- White NH
- Multiple Races NH
- Hispanic
- All Races/Ethnicities

The Ten Steps to Successful Breastfeeding

- WHO/UNICEF 1998 report
  - Baby Friendly Hospital Initiative based on adoption of the Ten Steps

- Disparities in initiation and exclusive rates disappear or significantly reduces race-based differences with Ten Step implementation

http://pediatrics.aappublications.org/content/116/3/628.full.pdf+html
The Ten Steps to Successful Breastfeeding

1. Written Breastfeeding Policy
2. Train all Healthcare Staff
3. Inform all Pregnant Women of Benefits
4. Help Mothers Initiate BF within One Hour
5. Show Mothers How to BF and Maintain Lactation
6. Give Newborn Infants Only Breastmilk
7. Practice Rooming In
8. Encourage BF on Demand
9. Give No Pacifiers or Artificial Nipples to Breastfeeding Infants
10. Foster the Establishment of BF Support Groups