MEASURING THE MILK OF CONFIDENCE: A REVIEW OF TWO BREASTFEEDING SELF-EFFICACY SCALES

Emilie Cunningham, MPH’13, Presenter

Healthy People 2020

<table>
<thead>
<tr>
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<th>Initiation</th>
<th>Breastfed 6 Months</th>
<th>Breastfed 1 Year</th>
<th>Exclusive 3 Months</th>
<th>Exclusive 6 Months</th>
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</thead>
<tbody>
<tr>
<td>HP Goal</td>
<td>82%</td>
<td>61%</td>
<td>34%</td>
<td>46%</td>
<td>26%</td>
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<tr>
<td>Current U.S.</td>
<td>75%</td>
<td>44%</td>
<td>24%</td>
<td>35%</td>
<td>15%</td>
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Self-Efficacy

- Definition
  The belief that one has the ability to carry out a specific behavior that will produce a particular outcome

Source of Self-Efficacy Expectations

- Performance Accomplishments
  - Previous nursing experience
  - Success / frustration of breastfeeding tasks

Effortlessly latches baby on versus Experiences difficulty

Source of Self-Efficacy Expectations

- Performance Accomplishments
  - Previous nursing experience
  - Success / frustration of breastfeeding tasks
  - Seeing other women
  - Peer Counselors

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Initiation: Breastfed 6 Months: 82% vs 61% HP Goal
Initiation: Breastfed 1 Year: 34% vs 24% Current U.S.
Initiation: Exclusive 3 Months: 46% vs 35% HP Goal
Initiation: Exclusive 6 Months: 26% vs 15% Current U.S.

Authors

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- M. Renée Umstattd Meyer, PhD, MCHES
- Sam Stroope, MA
- Emilie Cunningham, CCE, CLC, MPH’13
Sources of Self-Efficacy Expectations

- Verbal Persuasion
  - Healthcare Professionals
  - Family Members
  - Friends

- Source should be deemed credible by the individual.

Sources of Self-Efficacy Expectations

- Physiological & Emotional States
  - Fatigue, pain, anxiety, or stress
  - Reduce breastfeeding self-efficacy
  - Inhibit oxytocin
  - Interfere with let-down reflex

Methods

- Literature search
  - Web of Science & PubMed
    - "Breastfeeding Self-Efficacy"
    - "BSES"
    - "BSES-SF"
    - Breastfeeding self-efficacy outcomes

Development of the Breastfeeding Self-Efficacy Scale

- Began with extensive literature review
  - Determined scale factors
    - Technique
    - Intrapersonal thoughts
  - Two factors yielded 46% of variance
    - Maternal skill & understanding of tasks necessary to successful breastfeeding
    - Maternal beliefs & attitudes about breastfeeding

Scale Development (cont’d.)

- Validity & Reliability
  - Content Validity
    - Expert Panel
    - Experienced breastfeeding mothers
  - Pilot Test
    - Cronbach’s alpha coefficient .96
    - High internal consistency
    - Worded changes
      - Based on mothers’ suggestions
      - Altered for brevity and clarity

Scale Development (cont’d.)

- Final instruments
  - BSES
    - 43 items
    - 5-point response system
    - Possible range 43-215
    - Higher scores = more confidence
  - BSES-Short Form
    - 14 items
    - Cronbach’s alpha score .94
    - Valid & reliable
Results – Duration & Exclusivity

Relationship between self-efficacy & breastfeeding outcomes (10 studies)

Impact of self-efficacy on duration (7 studies)

Impact of self-efficacy on exclusivity (3 studies)

Self-efficacy predicts duration

Prenatal scores associated with lower initiation

If higher self-efficacy, higher exclusivity

Significant predictor of exclusivity

Results - Interventions

- Not Effective
  - Journal
  - Workbook

- Effective
  - Prenatal breastfeeding workshop
    - Higher exclusivity
    - Higher self-efficacy
    - Lower rates of weaning at 8 weeks
  - BSES-SF as intervention
    - Tailored intervention based on results
    - Higher exclusivity & duration
    - Not statistically significant

Maternal Characteristics

Maternal perception of infant weight gain → High breastfeeding self-efficacy

Other Uses of BSES

- The development of new tools
  - BeginningBreastfeedingSurvey
    - Assess maternal perceptions of breastfeeding effectiveness during hospital stay

- As a control measure
  - Impact of Baby-Friendly practices on breastfeeding rates

- Measuring training effectiveness
  - Changes in BSES scores after Baby-Friendly training on health care staff

Discussion - When to Use

Within this review
- In-hospital
- 1, 4, 6, & 8 weeks postpartum

A best reflection
- 1-2 weeks postpartum
- Gives experience of actually breastfeeding

For predicting duration
- 1-2 weeks postpartum
- More accurate than prenatally or immediate postpartum

Discussion (cont’d.)

- What is “exclusive breastfeeding”? 
  - Must define consistently
  - Otherwise, comparing findings is challenging.

- Long Form vs. Short Form?
  - Short Form is valid & reliable.
  - Must use Long Form in languages in which Short Form is unavailable
Practical Implications

- Breastfeeding self-efficacy can independently predict breastfeeding patterns.

Conclusion

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<tr>
<th>Valid &amp; Reliable Measurements</th>
<th>Assess Maternal Confidence</th>
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<tr>
<td>BSES</td>
<td>BSES - SF</td>
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<tr>
<td>Predictors of Breastfeeding Success</td>
<td>Techniques to increase self-efficacy</td>
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Recommendations

- Breastfeeding self-efficacy independent predictor
- Not possible with demographic data
- Future research? More diverse sampling

Recommendations for Future Research

- Relationship between perceived insufficient milk and breastfeeding self-efficacy
- Impact of hospital supplementation on breastfeeding self-efficacy
- Developing & assessing interventions aimed at increasing breastfeeding self-efficacy
- Effects of breastfeeding self-efficacy on outcomes >6 months
- Using larger sample sizes & incorporating minority communities

Recommendations

- Alter social norms to improve maternal confidence

Presenter Disclosures

Emilie Cunningham
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No relationships to disclose
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