Skin-to-Skin Contact During Cesarean Section and Post-Op Recovery

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Outline

- Background
  - Significance of Skin-to-Skin Contact (SSC)
  - Cesarean Section in the US
  - Catalyst for Change
- Procedures (Methods)
  - Procedure
  - Data collection and analysis methods
- Findings: Maternal Comments
- Clinical Implications
  - Suggestions for Mother-Baby Staff
- Q&A
What's with this 'granola' trend, anyway? Can't they just wait awhile?
Skin-to-Skin Contact

Kangaroo Care
What do you think of when you hear Skin-to-Skin Contact (SSC) or kangaroo care?
Skin-to-Skin Contact

• Why the push for immediate SSC?
• Brief history
  • Drs. Martinez-Gomez & Rey-Sanabria (Pediatricians)
  • Bogota, Columbia late-70’s
  • NICU overcrowding
  • Wet-Nurse
  • Research published mid-80’s
  • Findings
  • Gene Cranston Anderson, RN
### Benefits of Skin-to-Skin Contact

<table>
<thead>
<tr>
<th>Mother</th>
<th>Neonate</th>
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<tr>
<td>• Decreases Post-Partum Depressive Symptoms</td>
<td>• Thermoregulation</td>
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<td>• Increases Responsiveness to Neonate</td>
<td>• Better CNS Control</td>
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<td>• Enhances Attachment to Neonate</td>
<td>• Soothing, Decreases Crying (Reduction of Energy Expenditure)</td>
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<td>• Reduces Stress</td>
<td>• Success in Breastfeeding</td>
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<td>• Success in Breastfeeding</td>
<td>• Weight Gain/Growth</td>
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<td>• Increases milk volume</td>
<td>• Analgesic</td>
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<td>• Faster Delivery of Placenta</td>
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References Available Upon Request
Skin-to-Skin Research

• Most humane method of care after birth (Moore, Anderson, & Bergman, 2007).
• Average of 17 years from research to practice.

Note:
• Apparent Life Threatening Events (ALTE’s)
Cesarean Section
Cesarean Section in the US

• WHO recommended range = 10-15%
• 1991 cesarean rate = 20.7%
• US Cesarean Rate: Steady increase from 1996 – 2009
• 60% increase since 1996
• In 2012, 1.29 million women delivered via cesarean section (Hamilton et al., 2013)
  • Representing 32.8% of all births
  • Current rate unchanged from 2011
  • 2010 = 32.9%
Common Practice During Cesarean and Post-Op Recovery

• Separation of mother and neonate.
• Mothers often reveal disappointment, distress, and dissatisfaction with the birth experience (Chalmers et al., 2010; Lobel & DeLuca, 2007; Porter et al., 2007).
• 2012 Cochrane review highlighted the need for more SSC research post-cesarean section (Moore et al., 2012).
Common Practice During Cesarean and Post-Op Recovery
Catalyst for Change

• Literature
  • 35 years of SSC study
  • Recent work post cesarean

• Maternal Request
  • Online dialogue, OB office requests, Hospital Requests

• Current Guidelines
  • Baby Friendly Hospital Initiative (UNICEF/WHO, 2010)
  • American Academy of Pediatrics (AAP, 2012)
  • Academy of Breastfeeding Medicine (ABM, 2008)

• Practice changing in our area
Guidelines
Step 4 (now interpreted as): “Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognize when their babies are ready to breastfeed, offering help if needed.” (p. 11)

- **Post Cesarean Guideline**: “After cesarean birth, mothers will report that their babies were placed in continuous, uninterrupted skin-to-skin contact with them as soon as the mother was responsive and alert, with the same staff support identified above regarding feeding cues, unless separation was medically indicated.” (p. 12)
Immediate Postpartum

- “The healthy newborn can be given directly to the mother for skin-to-skin contact until the first feeding is accomplished. The infant may be dried and assigned APGAR scores, and initial physical assessment performed, as the infant is placed with the mother. Such contact provides the infant optimal physiologic stability, warmth, and opportunities for the first feeding. Extensive early skin-to-skin contact may increase the duration of breastfeeding. Delaying procedures such as weighing, measuring, and administering vitamin K and eye prophylaxis (up to an hour) enhances early parent-infant interaction. Infants are to be put to the breast as soon after birth as feasible for both mother and infant (within an hour of birth).” (p. 129-130)
In 2009, the AAP endorsed the WHO/UNICEF 10-steps to Successful Breastfeeding Program (BFHI)

“emphasis is placed on the need to revise or discontinue disruptive hospital policies that interfere with early skin-to-skin contact” (p. e834)

“There is a need for major conceptual change in the organization of hospital services for the mother and infant dyad. This requires that medical and nursing routines and practices adjust to the principle that breastfeeding should begin within the first hour after birth (even for cesarean deliveries)” (p.e834)
Suggestions for hospital policy changes
(AAP, 2012, p. e835)

TABLE 5 Recommendations on Breastfeeding Management for Healthy Term Infants

1. Exclusive breastfeeding for about 6 mo
   - Breastfeeding preferred; alternatively expressed mother’s milk, or donor milk
   - To continue for at least the first year and beyond for as long as mutually desired by mother and child
   - Complementary foods rich in iron and other micronutrients should be introduced at about 6 mo of age

2. Peripartum policies and practices that optimize breastfeeding initiation and maintenance should be compatible with the AAP and Academy of Breastfeeding Medicine Model Hospital Policy and include the following:
   - Direct skin-to-skin contact with mothers immediately after delivery until the first feeding is accomplished and encouraged throughout the postpartum period
   - Delay in routine procedures (weighing, measuring, bathing, blood tests, vaccines, and eye prophylaxis) until after the first feeding is completed
   - Delay in administration of intramuscular vitamin K until after the first feeding is completed but within 6 h of birth
   - Ensure 8 to 12 feedings at the breast every 24 h
   - Ensure formal evaluation and documentation of breastfeeding by trained caregivers
Armed with all this information, I approached TCH-PW.

Conduct a study where mothers would hold their neonates in SSC during cesarean closure.

Interview the mothers about the experience afterward.

**Dissertation Study**: Exploring the Skin-to-Skin Contact Experience During Cesarean Section

- Qualitative Study
Methods

What procedures were used?
Exclusion/Inclusion Criteria

Inclusion Criteria
Mothers scheduled for a cesarean section who:

1) Are carrying a live, singleton fetus with no preexisting special needs.
2) Have achieved between 39-42 weeks post menstrual age (PMA) by obstetrical dates and have maintained good prenatal care.
3) Obtain regional anesthesia during surgery.
4) Are able to speak and read English.

Exclusion Criteria

1) Maternal complications associated with surgery, such as excessive blood loss or uncontrolled nausea or pain.
2) Any neonatal problem requiring immediate separation from the mother for medical care or NICU admittance.
Procedures
Sequence of Events: SSC and Cesarean Section Study (TCH-PW)

1) Neonate’s birth by scheduled cesarean section.
2) Neonate dried and initial assessment on warmer. 1/5 minute APGAR obtained. Diaper and cap placed on the neonate.
3) Neonate placed skin-to-skin on the bare chest of the mother in a transverse and prone position, above the sterile field. Warm and dry blankets placed across the back of the neonate.
4) Continuing neonatal assessments conducted while the neonate is in SSC on the mother’s chest during cesarean closure.
5) The newborn’s nurse will be responsible for monitoring the baby during the remainder of the cesarean procedure, allowing the anesthesiologist to continue monitoring the mother.
6) The dyad will remain in SSC as they are transported to the recovery room.
7) While in recovery, all procedures and assessments to be conducted while the neonate remains in SSC with the mother.
8) The mother and infant will remain in SSC for a minimum of 1 hour or until the first breastfeeding.
Procedures
Sequence of Events: SSC and Cesarean Section Study (TCH-PW)

Birth via cesarean → 1/5 min APGAR obtained on warmer → At 5 min of life, if mother and neonate stable: Begin SSC, neo in transverse position, on the OR table → Nursing care continued while neonate in SSC with mother → SSC continues until 1st breastfeeding or 1 hr of life.
Procedures

**Videos**

- **WOMAN TO WOMAN. CHILDBIRTH EDUCATION**
  
  
  (0:20-1:40)

- **SMITH, PLAAT, & FISK. 2008. THE NATURAL CESAREAN: A WOMAN CENTERED TECHNIQUE.**
  
  [HTTP://www.youtube.com/watch?v=m5RlcaK98Yg](HTTP://www.youtube.com/watch?v=m5RlcaK98Yg)
  
  (0:00 – 14:30)
Research Study

Qualitative Data Collection & Analysis

• Data Collection
  • Direct Observation – field notes
  • Interview with the mother (24-72 hours postpartum)

• Data Analysis
  • Content Analysis
  • Iterative and Recursive
Results
Tell us what you found!
Participant Data

- Table 1
Participant Data

- Table 2
Findings from Qualitative Work

- Mutual Caregiving
  - Reciprocal Calm
  - Touch, Shared Proximity, Bond
  - Natural Contact, Effects on Breastfeeding
- Father’s Influence
- Cesarean Environment
  - Poor Positioning
  - Interruptions, Monitoring Equipment
  - Disruption of Mutual Caregiving
"Mothers and Neonates meet each others’ needs in the proper habitat together" (Anderson, et al., 2004).

- Immediately interactive and responsive to one another
- Tune all else out.
Mutual Caregiving

**Reciprocal Calm**
- Desire one another, need one another, calm one anther through their interaction

**Touch, Shared Proximity, Bond**
- Reassuring and Meaningful
- Vocalization
- Strong Bond
Mutual Caregiving

Natural Contact, Effects on Breastfeeding

• Natural during cesarean
• Progression toward breastfeeding observed
• Recovery room latch
Father’s Influence

• Father’s presence
• Buffer to the environment, yet part of the environment
Father’s Influence

- Presence and participation
- Formation of the family unit
- Support for the mother during Cesarean
Cesarean Environment

- Operating Room Environment
- Surgical Procedure
- Monitoring Equipment, Staff Involvement
Cesarean Environment

- SSC alleviated anxieties associated with the cesarean
Cesarean Environment

- Poor Positioning
  - Visualization
  - Neonates movement from atop breast tissue
- Interruptions, Monitoring Equipment
- Disruption of Mutual Caregiving
  - Shorten or delay the SSC
Clinical Implications

How can I incorporate this into my practice? Suggestions from study participants.
Maternal Role Confidence

- Giving mothers the power from the very beginning.
Nursing Procedures Post-Cesarean

- What can wait?
- What can I do with baby on mom?
- How can I keep mother/baby at the center of this experience?
Cesarean Mother Education

- What to expect before and during the cesarean.
Support Person Prep

• OR bedside
Let's chat
References

Available Upon Request