Parent-Infant Attachment

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What is Parent-Infant Attachment?

Parent-infant attachment is...

“The bond between a child and a parent with its purpose being to make the child feel safe, secure, and protected” (Benoit, 2004).

The environment of the NICU is not optimal for developing this attachment as the parents and baby have to be separated.

Much research has been done on methods to improve the issue.

Two interventions that can improve attachment include:
- Better nurse-parent communication and teaching
- Skin-to-skin contact
Thanks to Steve...
Search Methods

Search engines: PubMed and CINAHL

Search terms:
- Parent infant attachment AND preterm
- Maternal infant attachment AND NICU OR skin to skin
- Mo* infant attachment NICU
- Pa* infant attachment NICU
- Mother infant bonding AND NICU
- Interventions OR strategies

Limits:
- English, research article, past 15 yrs, full text
<table>
<thead>
<tr>
<th>Study #1</th>
<th>Study #2</th>
<th>Study #3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td><strong>Methods and Measures</strong></td>
<td><strong>Findings</strong></td>
</tr>
<tr>
<td>Cox et al.</td>
<td>Explore how communication facilitates attachment</td>
<td>Effectiveness of a dedicated parental training program on the attachment between a pre-term infant and its mother</td>
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<td>Skene et al.</td>
<td>Qualitative and quantitative methods to study the phenomenon of the attachment process in relation to communication factors</td>
<td>Experimental study that split parents up into 2 groups (PC-A and PC-B). Both had parents involved in daily care of the infant, but PC-A had a parental training program</td>
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<td>Steinhardt et al.</td>
<td>Observational study of parents’ interaction with their infant in the NICU. Data collected on families of 11 infants</td>
<td>The parent-infant attachment was stronger in PC-A with the parental training program</td>
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**Findings**
- Supplemnting info in nurses notes, regular up to date info on infant’s condition relayed to parents & joint care planning with families to achieve *individualized* care
- *Parental involvement* in NICU supports parent/infant attachment & facilitates transfer of care from nurse to parent
Synthesis: Communication and Teaching

- Overall, we found that the *relationship between the healthcare provider and the parent* is integral in fostering a closer bond between the parent and the infant.
- The only differences were in the application...
  - In study 1, it was *communication* between the parent and nurse.
  - In study 2, it was *support* from the nurse for the parent.
  - In study 3, it was *teaching* and *intervention* by the nurse in order to help the parent.
# Skin-to-Skin Contact

<table>
<thead>
<tr>
<th>Study #1 Cong et al.</th>
<th>Study #2 Gathwala et al.</th>
<th>Study #3 Carbasse et al.</th>
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<tbody>
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<td><strong>Purpose</strong></td>
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<td>Effect of SSC on oxytocin and cortisol levels of parents with babies in NICU</td>
<td>Determine if KMC facilitates mother baby attachment in low birth weight infants</td>
<td>Safety and effectiveness of SSC with vulnerable infants in the NICU</td>
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<td><strong>Methods and Measures</strong></td>
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<td>Cross over study-maternal / paternal SSC-measured saliva of parents to determine bonding / anxiety levels</td>
<td>Randomized Control Trial-babies receive standard care vs. KMC. Measured using structured maternal interview</td>
<td>Observational study of first SSC: recording of vital signs and need for interventions</td>
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<tr>
<td><strong>Findings</strong></td>
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<td>SSC caused <em>increased oxytocin</em> and <em>decreased cortisol</em> levels. Also decreased anxiety of parents→ Facilitates attachment</td>
<td>KMC mothers <em>bonded better</em> with their infants and were <em>more attached</em> to them compared to control group</td>
<td>Safe for vulnerable preterm infants. Should be started <em>as early as possible</em> because of developmental benefits</td>
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Skin-to-skin contact (SSC) improves parent-infant attachment in both mothers and fathers.

SSC facilitates bonding on both physiological (e.g. oxytocin/cortisol and vitals) and emotional levels (e.g. maternal interview).

This is beneficial to the health of BOTH the developing infant and the parents.
Conclusion

Overall, healthcare professional and family relationships as well as skin-to-skin contact have proven to be useful interventions for the promotion of parent-infant attachment.
Overall Interpretation of Knowledge

Current State of What is Known
● The physical isolation of infants in the NICU strains the relationship between parent and child causing attachment issues
● The stress of premature birth negatively affects parenting behaviors and their attitude towards their children

Remaining Gaps in Knowledge
● No interventions really solely focus on improving the infant’s own ability to connect and relate with the parent
● Most of the studies had small sample sizes and were restricted to one facility
● More information is needed on the biological/physiological aspects of parent-infant attachment
Implications for Nursing Practice

- **Educate** the parents about providing physical touch during the infant’s early life
- Use SSC as early and as long as possible
- Form a **relationship** with the parents to understand each other’s roles
- Neonatal nurse training should also focus on **emotional** and **psychological** needs of parents
- Foster hospital programs that help strengthen parent-infant bonds
- Keep family informed about baby’s health
- Joint care planning to achieve **individualized care**
Recommendations for Future Research

- Replication of certain interventions, like the inclusion of a parental training program for parents who have newborns in the NICU, to see if the outcomes are the same
- More studies need to be done to clearly demonstrate the effects of SSC in the long-term relationship between parent and child
- Larger sample sizes to improve accuracy of results
- Implement interventions into more hospitals and compare results


