

## Parent-Infant Attachment

Katheryn F. Frazier, MD, Rebecca J. Scharf, MD, MPH

*Division of Developmental Pediatrics, Department of Pediatrics, University of Virginia, Charlottesville, VA*

**AUTHOR DISCLOSURE** Drs Frazier and Scharf have disclosed no financial relationships relevant to this article. This commentary does not contain a discussion of an unapproved/investigative use of a commercial product/device.

Attachment, which refers to the bidirectional bond that is formed between children and their caregivers, is a process that begins in utero and continues throughout the first year of life and beyond. John Bowlby introduced attachment theory in the 1950s, describing secure attachment as requiring an available and responsive caregiver to promote normal cognitive and emotional development in the child. Although Bowlby focused on the mother, we now recognize attachment between father and child to be significant too.

These concepts were further studied by Bowlby's student, Mary Ainsworth, in the 1970s through the Strange Situation experiments. In these experiments, children were repeatedly separated for brief times and then reunited with their mothers while the children's reactions were recorded. Ainsworth initially found that there were 3 main types of attachment between children and their mothers: secure, avoidant, and ambivalent. A fourth type, disorganized attachment, was classified later. Children with secure attachment use their parents as a secure base from which to explore their environment. They seek out their caregivers for reassurance when stressed and then quickly return to exploring and playing. This security between child and caregiver suggests that the caregiver has been available, consistent, and responsive to the child's behavior and emotions.

Although it was initially thought that the process of infant-to-mother attachment began at birth, it is now known that the process starts in utero. The fetus experiences the mother's body odor through the amniotic fluid and her voice through transmission of sound through her bones and amniotic fluid. Newborns prefer the sound and smell of their own mother to those of a stranger, which is believed to help them transition to life outside the womb. When placed on the mother's abdomen right after birth, a newborn may instinctively and independently move to try and initiate breastfeeding. Newborns also orient to the sound of their mother's voice and are more easily soothed by her voice compared with a stranger's voice. This provides positive feedback to the mother and promotes her bonding to the infant during this transitional time.

Because of these important interactions between mother and newborn, more hospitals are creating new nursing policies to help promote bonding while in the nursery. Simple changes, such as putting the infant on the mother's chest immediately after delivery, administering medications and giving baths to the infant while the infant is on the mother's chest, and breastfeeding within the first hour of life, have been initiated in many nurseries. In addition, fewer hospitals take newborns from their parents to stay in a separate nursery. Now newborns often room-in with their mothers, and almost all newborn examinations and care take place in the mother's room. By rooming-in, the bonding process can be continued, and the mother and infant can continue to work on breastfeeding as well.

These types of hospital and nursing policies are even more important when, because of illness or prematurity, the newborn is admitted to a neonatal intensive

**Infant-Mother Attachment.** Ainsworth MD. *Am Psychol.* 1979;34(10):932–937

**Bonding: Recent Observations That Alter Perinatal Care.** Kennell JH, Klaus MH. *Pediatr Rev.* 1998;19(1):4–12

**Bonding.** Lee C, Cheng TL. *Pediatr Rev.* 2003;24(8):289–290

**How Bereaved Multiple-Birth Parents Cope With Hospitalization, Homecoming, Disposition for Deceased, and Attachment to Survivors.** Pector EA. *J Perinatol.* 2004;24(11):714–722

care unit (NICU). Because of the nature of illnesses requiring a stay in the NICU, the opportunity for the parents and newborn to have physical contact and begin the attachment process may be limited. Studies examining attachment in the NICU have found that mothers and fathers may perceive their attachment differently and that simple changes can be made to promote attachment. Although the mother's sense of attachment may be focused on the physical contact between her and her infant, fathers are more likely to feel attachment through looking at the infant, taking pictures, and observing the bond between mother and infant. To promote attachment, caring attitudes by nurses and physicians, open and regular communication, and allowing for rooming-in so that parents can provide care for the infant with some supervision from staff before discharge are all positive interventions.

Another situation that may make attachment more of a challenge for parents is when twins, triplets, or higher-order multiples are born. All parents have some anxiety and fear about their newborn, but these feelings can be intensified with multiple births and can interfere with the caregivers' ability to bond with their infants. In addition, it is not uncommon for one or more of multiple newborns to be ill, leading to some of the issues mentioned above surrounding NICU care. Bonding and attachment may vary between the caregivers and the infants, with each parent feeling attached to one infant more than another. This is even more common if one infant remains hospitalized while the other(s) are at home.

If an infant dies, either through stillbirth or neonatal death, the response to the grieving family by the medical care team is very important in the healing process. In surveys of families who have lost a child, emotional support, open communication, and the opportunity to hold their infant have all been reported as beneficial in the grieving process. Furthermore, services such as photography, creation of hand and foot molds, and help with final arrangements are often provided to help the family remember and honor their loss.

When one or more infants are lost in a multiple-gestation pregnancy, an added layer of emotional and logistical difficulty is added. Parents have reported having difficulties attaching to the surviving children and noted feelings of ambivalence, shock, and disassociation. On the other hand, some parents have responded by overly attaching to their surviving infant(s). After a neonatal loss, some mothers have a hard time developing an attachment during a future pregnancy for fear of losing this infant as well and being heartbroken once again. Often families do not feel safe to begin the attachment process until the infant is actually born.

Measures taken to help parents bond with infants from birth throughout childhood are important for healthy development and growth. Children who have secure attachment to a consistent and sensitive caregiver have a stronger foundation for developing other healthy and strong relationships in the future. Parents who are emotionally available to their children promote lifelong well-being and health.

**COMMENT:** Given long-standing cultural prejudices, it is not surprising that attachment theory initially focused exclusively on mothers. After all, mothers were responsible for autism, weren't they? Fortunately, we can learn, through evidence, to identify and then correct our prejudices. We have long recognized that maternal depression and other mental health problems can significantly affect a child's well-being and development, but only recently have studies examined the possible effect of a father's mental health on his child's emotional growth and behavior. As with attachment, it turns out that fathers count. A father's mental health can indeed influence a child's emotional and behavioral development: children living with a father who is depressed or has other mental health problems are at increased risk for emotional and behavioral problems of their own.

– Henry M. Adam, MD  
Editor, *In Brief*

### NOTICE OF RETRACTION

Deborah M. Consolini, *Thrombocytopenia in Infants and Children*, *Pediatrics in Review*. 2011;32;135 (American Academy of Pediatrics). The American Academy of Pediatrics has removed this article from circulation because it contained citation and attribution errors. The journal apologizes to our readers and the authors of any sources that were not correctly cited.

### ANSWER KEY FOR JANUARY 2015 PEDIATRICS IN REVIEW:

Acute Poststreptococcal Glomerulonephritis: 1. A; 2. B; 3. A; 4. E; 5. A.

Epigenetics in Pediatrics: 1. C; 2. A; 3. A; 4. A; 5. B.

The Patient-Parent-Pediatrician Relationship: 1. C; 2. D; 3. D; 4. B; 5. A.

**Parent-Infant Attachment**  
Katheryn F. Frazier and Rebecca J. Scharf  
*Pediatrics in Review* 2015;36;41  
DOI: 10.1542/pir.36-1-41

**Updated Information & Services**

including high resolution figures, can be found at:  
<http://pedsinreview.aappublications.org/content/36/1/41>

**References**

This article cites 4 articles, 2 of which you can access for free at:  
<http://pedsinreview.aappublications.org/content/36/1/41.full#ref-list-1>

**Permissions & Licensing**

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:  
<https://shop.aap.org/licensing-permissions/>

**Reprints**

Information about ordering reprints can be found online:  
<http://classic.pedsinreview.aappublications.org/content/reprints>



## **Parent-Infant Attachment**

Katheryn F. Frazier and Rebecca J. Scharf

*Pediatrics in Review* 2015;36;41

DOI: 10.1542/pir.36-1-41

The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pedsinreview.aappublications.org/content/36/1/41>

Pediatrics in Review is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1979. Pediatrics in Review is owned, published, and trademarked by the American Academy of Pediatrics, 345 Park Avenue, Itasca, Illinois, 60143. Copyright © 2015 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0191-9601.

## American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®

