Knowledge about the first three years of an infant’s development is expanding rapidly. As hearing health professionals we champion both the need for auditory access and early intervention in those first three years to grow a child’s neural connections. From the age of seven months gestation to two years of age the infant’s brain grows from 25% of its eventual adult size to 75% of its adult size. Not only is there a rapid growth in size but an increased complexity due to the wiring of neurons (synaptogenesis) during this critical period. This dense branching is subject to the influence of the baby’s environment and attachment relationships. Early experiences shape which neural pathway is strengthened and which neural pathway will be pruned away. The baby’s early environments matter and early relationships are essential for a baby’s brain growth and the effects on subsequent development. It is critical for hearing health professionals to recognize the importance of an infant or child’s relationship with his parent or caregiver and our families benefit when we partner with professionals who are specialists in infant mental health. The focus of the Infant Mental Health field is “the developing capacity of the infant and toddler to form close and secure relationships; experience, regulate, and express emotions; and explore the environment and learn all in the context of family, community, and cultural expectations for young children (Zero to Three Infant Mental Health Task Force).”

Babies do not develop and learn on their own, but through a primary attachment relationship with their caregiver. Babies give a signal when in need and when their caregiver is sensitive to these cues and responds appropriately, the baby learns he can express a need for help and in turn receive it. This serve and return interaction creates the essential piece of safety and trust that allows the baby to go into his environment to explore, develop and learn. This lasting and deep emotional connection between an infant and caregiver that we identify as attachment, is critical for further infant development. When there are significant disturbances to this attachment relationship, the baby is at risk for impairment in his development and social and emotional functioning that can have serious consequences later in life. Babies can’t speak through words, so it is important as clinicians we spend time observing and talking about their behaviors and helping their primary attachment figure understand what this behavior may mean.

For infants or children who have hearing loss, it is critically important to assess the parent-infant relationship because in infancy, quality of attachment has a powerful influence on the course and outcome of the baby’s progress. In the early months of hearing loss, parents might believe that they can’t connect with their child due to the fact he can’t hear their voices. Additionally, a parent or caregiver may be grieving the diagnosis while also attempting to manage new hearing aids or technology at the same time. If we as providers can familiarize
ourselves with some of the warning signs of poor attachment, we can then support the family in establishing a secure attachment. We can also coach parents in ways that will strengthen the attachment that will allow the baby to thrive. The following questions are helpful both diagnostically and therapeutically when working with families and infants with hearing loss. As we learn to become better observers of infant behavior, caregiver behavior and the exchange between the two, we can address concerns before they become obstacles in the most important relationship in an infant’s growing brain.

Observations of caregivers and babies can begin in the waiting room and continue throughout either an audiology appointment or a therapy session. Ideally when both the pediatric audiologist and speech-language pathologist are familiar with the characteristics of a healthy attachment between parent and child, it is wise to gather information from both professionals. It is important that the observation also include activities that involve both free play between the infant and caregiver and a structured task such as stacking blocks, rolling a ball or feeding a baby doll. Standardized assessments and questionnaires are helpful in formulating diagnoses and treatment plans but cannot replace the case material gained from thoughtful observations and questions geared towards understanding the quality of attachment between an infant and their caregiver. (Davies, Child Development, p166)

The following are ten questions to guide an observation when working with infants and children with hearing loss and their families to improve outcomes and build better relationships

With infants who arrive in the clinic for evaluation or therapy, it is often best to begin with a focus on the caregiver.

1. **How does the parent/caregiver physically handle his/her infant?**

With newborn hearing screening, it is not uncommon to meet a family only a week or two after the birth of a child. Quality information can be gained from simply observing how the parent brings the child into session. Does the parent/caregiver attempt to hold her infant when he becomes fussy or signal they want out of the car seat or do they leave them in the car seat and attempt to appease them through other means? Does the infant settle and appear comfortable in their parent’s arms or does the physical touch appear rigid or mechanical? Recently, a young mother who had been coming to the clinic weekly for six weeks had to be prompted to remove her child from the car seat when he became agitated. While holding him, the baby’s head continued to “bob” and it was clear that she was very uncomfortable with him in her lap. In contrast to this picture is the young mother who knows intuitively to hold her baby close to her chest or in a position on her lap where she can engage her daughter through eye contact, or a game of raspberries. Conveying to caregivers that how they lift, carry or hold a child reflects their emotional state, and research supports that babies feel most safe when the parent is calm, tender and relaxed in contrast to angry, frustrated or stressed.
2. Is the parent/caregiver talking to her infant? How is the parent/caregiver talking to her baby?

Motherese, or the language that some refer to as “baby talk” is typical of most adults when they encounter a young baby. The high-pitched melodic song-like pattern is very engaging for most infants and some adults automatically respond in that way. If a young mother has never heard that type of cooing or sing-song inflection, she is not likely to do it herself. All too often, with the availability of technology, a caregiver might use a phone or tablet to attempt to engage a child rather than realizing that a baby’s favorite toy is actually his primary caregiver. A non-verbal conversation can happen with a newborn. What is the tone of her voice? Even a child with hearing loss can hear the suprasegmentals or the pitch and can understand the difference between a tone that is harsh or indifferent to one that demonstrates tenderness, concern and adoration. This is an excellent opportunity to help teach the family the impact of hearing loss but the need for focus on the variety of sounds that can be heard even by babies with very significant hearing loss when well-amplified early.

3. How is the parent/caregiver talking about her baby?

How the parent describes the personality and interactions with their infant can give us more information on how the parent views the infant? A parent who describes their infant as spirited, independent, expressive and determined is creating a much different story for their child than a baby who is described as difficult to please, crabby, manipulative and always upset. These two babies grow up hearing two different messages about themselves and their needs from their parents. In a therapy session recently, a mother stated that her child is always fussy, difficult to take care of, and screams constantly in the car. The mother also shared that she hesitates to take her daughter anywhere because “I can’t have any fun if she is with me.” When probed further by the therapist, the young mother was unable to describe any activity that her daughter enjoyed and reiterated that her baby is always in a bad mood. Infants may not understand the words a mother is saying, but they certainly have the ability to sense if there is stress or frustration from their caregiver in response to their cues for help.

4. How does the mother or primary caregiver respond when there is another primary caregiver present?

Observing the infant in relationship with other primary caregivers can also give significant information about the quality of attachment and the infant’s personality and temperament. An infant can respond differently to different caregivers. Is the father calmer in his approach when the infant cries? Is the mother better able to help the infant explore their environment but struggle with helping the infant calm down when
they are upset? Without observing the infant with his other primary caregivers or asking about the infant’s interactions with them, we could only be seeing one part of the infant’s experience in relationship which may accurately represent the infant’s attachment.

5. What is the general status of the baby?

It is important to explore the birth history or early health history of every infant/child because an infant’s well-being can affect his attachment. Infants born prematurely or who have extended NICU stays may have early life experiences that leave them stressed, unregulated or unsafe. If prenatal care was limited or the baby struggled to gain weight after his birth, the likelihood of a disturbance in his attachment is high. Our experience with infants in state custody or the foster care system is that they are certainly at much greater risk for poor attachment and therefore it is critically important to address strategies for establishing a healthy bond with a foster family as soon as possible.

6. How present is the parent/caregiver in the session?

How mindful is she of what is happening in the booth? Making new earmolds? One of the greatest improvements in our access to information through smart phones and tablets also creates one of the greatest challenges for parents to respond consistently to an infant’s cues and behaviors. Parents and caregivers can often miss the “magic of everyday moments” when changing diapers, sitting at the dinner table, bath time, etc. by remaining engrossed with our phones or television. These moments in session and at home provide parents a critical opportunity for singing, talking, reading and simply remaining present in the moment with their baby. How is the appropriate use of technology being modeled in your clinic and in sessions? What are you observing in the waiting room between parents and infants?

7. How does the parent/caregiver respond to her baby?

In the earlier points, we have focused on the parent’s behaviors and the infant’s unique behaviors but intentionally focusing on the interaction between the two gives more information about the quality of attunement and responsiveness to each other. It is important for providers to spend time observing how responsive a parent is to his/her baby. Is she able to see her needs and read her signals? Can the parent/caregiver maintain eye contact, smiling, sharing perceptions and attention? How responsive is the parent to the baby: is she able to see her needs, read her signals? Is there behavior observed from the either the infant or parent that may make it difficult for the parent to respond to the infant’s cues? Infants vary in temperament and their behavior can make
it difficult for a parent to feel joy in being able to meet their needs. A parent may be experiencing isolation and on-going grief issues regarding a hearing loss diagnosis that makes it more difficult to see their infant. In a recent staffing regarding a family who was struggling to keep hearing aids on their daughter, the therapist noted that “Jane’s mother did not respond to her infant’s attempts to capture her attention such as fussing, waving her arms and squirming. The mother also missed other behavioral cues from Jane that indicated she was interested in a toy. Her mother has not been observed to initiate play with Jane but will imitate the therapist when prompted. She did not engage Jane in face-to-face play or respond to Jane’s cues for attention during therapy.”

8. How equipped is the parent to help the baby regulate distress?

It is important to observe how well a caregiver/parent is able to calm her baby. In the previously discussed child it was clear that Jane’s mother was not able to help regulate her distress in session. Through observation the therapist noted that Jane did not maintain eye contact with her mother and was observed to pull away from her attempts to comfort. She did place the baby on a blanket and Jane calmed when she was placed away from her mother. This prompts more questions such as why is Jane unable to calm down in her mother’s arms. How does this impact the mother’s ability to feel successful in caring for her child? A strong attachment between an infant and caregiver is one of the best protective factors against future stress. A parent being a careful observer of their infant’s behaviors while also having routines and flexible strategies to respond to their infant’s distress supports attachment.

9. To what degree can the parent reflect on the meaning of the baby’s behavior and emotions?

At staffing the therapist reports that Jane’s mother has difficulty seeing the world from Jane’s perspective and states that “I can’t have any fun if Jane is with me.” Her mother does not appear to enjoy her time with Jane and seems burdened by the difficulty she has in taking care of her. What is keeping this mother from understanding and empathizing with her daughter? How can we support the mother in gaining more appropriate developmental expectations for her daughter? How does this mother’s views impact her daughter’s progress in therapy?

10. What would be your goals in working with a family where there is concern about the quality of attachment between the infant and caregiver?

When there is a concern regarding attachment, the first goal is always to provide the parent with developmental information. Talking to a parent and sharing that other
babies are fussy, and that other parents experience this same frustration in meeting their baby’s needs often helps decrease some of the isolation a caregiver may feel. Providing strategies to help the mother calm Jane while also bringing the mother’s attention to some of Jane’s behaviors as clues to understanding if Jane maybe wants comfort or wants to explore will increase the mother’s success in meeting Jane’s needs.

Another goal in therapy for a family concerned about attachment is to find a joyful activity the two can experience together. Having a wide array of developmentally appropriate, simple activities is a great starting point for a parent and baby to duplicate at home. Structuring an office space that is peaceful and calm allows a mother/caregiver and child to be supported in experiencing joy in their interactions. It also serves as a model for how to provide that safe place outside of the clinic.

Utilizing these questions will give a more clear understanding of the relationship between a baby and her mother/caregiver. Consultation is an essential piece of Infant Mental Health and discussing these observations and relationships with your colleagues can also give more clarity about the relationship dynamics present. These observations and discussions help create thoughtful interventions for an infant or child and his mother/caregiver that are possible to address in therapy.

There are some relationships where the attachment needs more support and continues to be a barrier for the child making progress in your treatment. If a family is not responding to your interventions to strengthen their attachment, seeking a referral with an Infant Mental Health Specialist would be the next step. Many states have an Association for Infant Mental Health that can provide a registry of Infant Mental Health Specialists. These states can be found at http://mi-aimh.org/alliance/members-of-the-alliance/. The health care authority in your state should also have a list of appropriate Infant Mental Health providers in your areas along with local universities that have early childhood programs.

Focusing on the development of a strong safe attachment between a parent/caregiver and child is an essential part of intervention. As clinicians we often enter sessions with our own agenda and can miss many opportunities to support the relationship between a parent and baby. Taking the time to be intentional about observations and remaining curious about each baby’s attachment with his parents, can only strengthen the services we provide.