Fragile Infant Forums for Implementation of IFCDC Standards: The Infant as Baby as a Competent Interactor

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Foundations of what we know about the baby as a competent interactor

For humans, life is dependent on interaction with others for survival, nurturing, and social exchanges. At birth, a baby's interaction is primarily dependent on sensory and physiologic exchange in concert with the mother or another essential caregiving person, which we now refer to as the m(other). Each member of the dyad brings their competence to the development of their own exceptional culturally appropriate relationship. These essential initial dyadic interactions lay a foundation for early development and beginning vocal and gestural communication. Also embedded in these early interactions is a rich emotional exchange that lays a foundation for attachment and bonding.

No longer is the baby considered a "tabula rasa" or "white paper, void of all characters," whose mind is developed primarily through experience after birth. Those were the views of followers of John Locke, whose philosophical stance continued through the 20th century (1). We now know the baby comes well prepared with observable behaviors that signal the need for interaction with their familiar m(other). The baby communicates physiologically and with their state of arousal and motor skills. These interaction components are present in fetal life and at birth, regardless of the baby's gestational age. They can indicate recognition and responsiveness to their mother's taste, smell, sound, movement, and face. They even come with familiarity and responsiveness to the mother's language and her community (2-5).

In the early 1970s, the work of T. Berry Brazelton and colleagues introduced the Newborn Behavioral Assessment Scale (NBAS), which described the many communicative behaviors of newborn babies, recognizing that they emerge from utero with a rich repertoire of organized behavior (6, 7). He emphasized that each baby has an individual temperament and ways of communicating right from birth. These observations and the development of the structured assessment (NBAS) articulated the behavioral repertoire of newborns and emphasized how babies strive to interact with their caregivers.

One of Brazelton's protégés, Dr. Heidelise Als, further articulated the baby's striving to connect with their m(other) through responsive changes in their behavior during interactions (8). Her observations were extended to babies born preterm, where she described a vast, intricate, readily observable, and measurable catalog of behaviors. She developed insights into understanding the baby's behavior that can be interpreted as a striving toward developmental goals and social reciprocity. (9, 10) The behavioral repertoire that she described has laid a foundation for an evidence-based program of interpreting the "voice of the newborn" or, to put another way, the baby as a competent interactor (www.nidcap.org).

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Based on Brazelton and Als's seminal work on communication, we can ask the baby about their developmental capacity and experiences. Other neurobehavioral assessments have been since developed, which evaluate the baby's preferences and competence in the face of responding to social bids, reflex elicitation, and holding. Various intervention studies now use behavior to measure their impact on the baby--measuring the baby's

behavioral responses to the environment, physical interaction with caregivers, and social bids (11-14). For example, several pain scales are based on observing behavioral responses in their faces, body, and physiological signs. (15, 16) Responses to therapies such as massage or music also depend on understanding the baby's interaction or withdrawal behavior as indicators of the baby's preferences. (17, 18) Using observations of the baby's behavioral communication and resulting interpretation of the baby's experience can and should be used with parents to demonstrate how best to understand their baby.(19)

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Relationship development—the baby's role as a competent interaction partner

Recent research provides a major focus on the efforts of the parent/caregiver to provide physical and verbal communication in interactions with their baby. (20-22) As active communicators, babies "hold their own" in interactions with their caregivers. They strive to engage in conversations through their physiologic behavior, movement, arousal, and sleep states. They are competent communicators and strive to interact with their caregivers in a meaningful dialogue. However, the baby's communication efforts are often not recognized and responded to. To demonstrate, when we attempt to converse with someone whose language is unfamiliar, we may avoid listening or misunderstand what they are trying to say.

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Babies have a unique way of communicating their need for interaction, social exchange, and development, which their interactors may not understand correctly. Should that person not have received training in babies' unique behavioral language, they may not notice and respond to the subtle communication efforts of a baby. In particular, it is likely to happen with fragile babies whose behaviors are not as straightforward as if they were robust communicators. Even with specific training, many professionals may not recognize the subtle attempts at communication if they are in a busy intensive care unit where the baby may be overwhelmed and unable to communicate effectively. Additionally, medical procedures take precedence in an intensive care unit, and professionals may not make a point of becoming fluent communicators with babies.

The mother as an active member of the interaction dyad

It is a given that human infants cannot survive without the protective nurturing of the mother. An early quote by Donald Winnicott is often cited to demonstrate that concept: "There is no such thing as a baby, there is only a baby and someone."(23) However, the separation of early born and medically fragile babies have relegated physiologic nurturing to machines, medicines, and revolving caregivers. The m(other) is often unavailable to the baby, as has been experienced in many intensive care units during the recent pandemic. (24-27) With the constraints of separation from the mother and experiencing multiple interactions with unfamiliar caregivers, i.e., "someone," the qualities of the baby as the competent interactor are often undetected. Too often, the baby is relegated to an "observer" rather than an "active participant" role during routine interactions and activities in the intensive care unit.

"'What about the baby'? It provides an opportunity to focus and reflect on what the baby is saying through their behavior; what they are requesting, what makes them comfortable, how they are striving towards their developmental goal, what bothers them, what exhausts them, what invigorates or energizes them, and most importantly, how do they participate in their care?"

Under stressful conditions such as intensive care, sensitive interactions between m(others) and their baby are affected, creating challenges to developing an attachment relationship. (28-30) Parents who find themselves in very stressful and potentially traumatic environments and circumstances need supportive interventions in order for them to develop a nurturing relationship with their babies. Policies to keep m(others) with their baby after birth through single-family rooms, couplet care, kangaroo m(other) care, and encouragement to be present are essential to support the baby and m(other) as competent interactors. The shift in intensive care to single-family rooms and "couplet care" is an important return to assuring that the baby and m(other) are together to develop their unique interaction and co-regulatory relationship. (31-34)

Research has emphasized the benefit of seeing the baby and m(other) as a co-regulatory unit both physiologically and socially and should be treated as such during hospitalization. (35-37) Care should be taken to provide for the support of the m(other) and emphasize how to help them understand the communication attempts that the baby offers.

Recognizing the baby as the core focus of caregiving in inten-

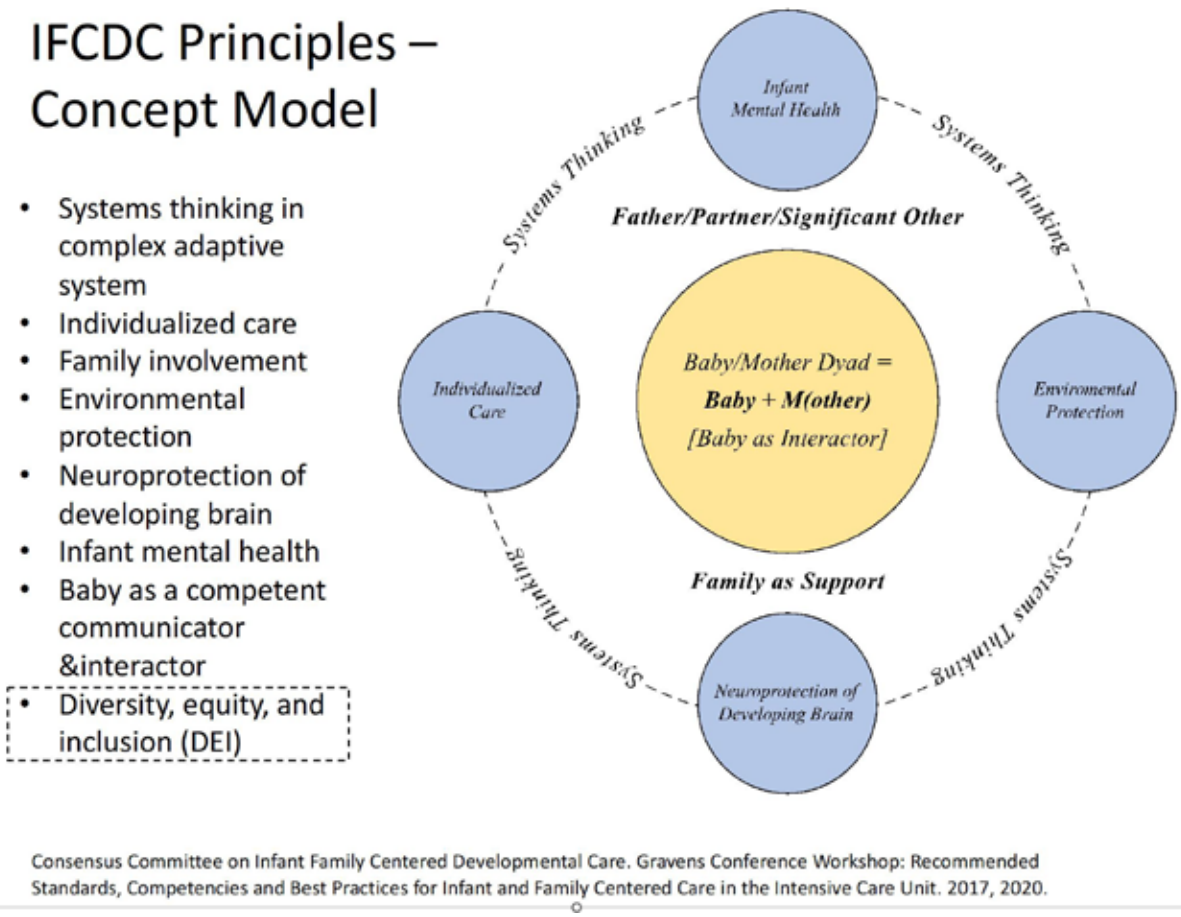

Figure 1

sive care

A well-understood question used in the field of Infant Mental Health and exemplifies how babies have been neglected in our professional interactions with families is to ask, "What about the baby"? It provides an opportunity to focus and reflect on what the baby is saying through their behavior; what they are requesting, what makes them comfortable, how they are striving towards their developmental goal, what bothers them, what exhausts them, what invigorates or energizes them, and most importantly, how do they participate in their care?

In the recently available evidence-based Standards, Competencies, and Best Practices in Infant and Family-Centered Developmental Care(38), a model has been developed to demonstrate the basic principles of Infant and Family-Centered Developmental Care (IFCDC) (Figure 1).

"One of the most rewarding aspects of regulation is that the baby is becoming a social interactor. So, supporting regulation in these areas is essential for later development."

The central "anchor" for the model is the inseparable coregulated baby and m(other). In this relationship, the baby should be given as much validation as an active interactor as is the m(other). The model emphasizes that the baby has individual strengths, vulnerabilities, and strivings toward relationships and is a competent interactor within the caregiving environment. As the core focus of IFCDC, the baby needs his or her efforts to communicate to be heard, understood, valued, and complimented.

Supporting the infant's efforts to be a competent interactor

Provide regulatory support: A baby's primary developmental goal is to become regulated in the face of their family environment and relationships. (36, 39) During the first few weeks and months, regulation is the foundation for what babies are working hard to achieve. As they develop, they become more stable in their physiologic functions, such as breathing, color changes, bowel movements, and temperature control, which are essential for later development. Reflexes present at birth become more volitional. Regulation of sleep states and becoming more predictable in their sleep cycles emerges. Coming to alertness for interaction for more extended periods is also a primary developmental goal that requires regulation of all the other foundational systems. One of the most rewarding aspects of regulation is that the baby is becoming a social interactor. So, supporting regulation in these areas is essential for later development.

Professionals need to know what regulation in these areas looks like, why understanding the behavior is essential, and how to

help the baby become more regulated in the face of the environment and caregiving. Often dysregulation occurs during social interactions, which may be too overwhelming to the baby and may be misinterpreted by the caregiver. Should professionals or parents not understand their baby's regulatory needs, they may not know how to respond to dysregulation and instead resort to other overwhelming sensory inputs that they feel will help with regulation.

Relationships: Babies and their m(other) should be supported to be together from birth with few extraordinary exceptions. The familiarity of the m(other)'s body, voice, movement, and sensory organization promotes regulation in the baby so that they become competent interactors. Emerging relationships can be enhanced through understanding what the baby is saying and responding according to what they say.

Human relationships are unique in that we typically communicate face-to-face and eye-to-eye. Removing barriers and distortions to seeing and holding the baby eye-to-eye and face-to-face will go a long way to allow the baby to develop regulated interactions and an emotional connection. (40) Recent research demonstrates that when the m(other) talks, sings, or reads to the baby, the baby strives to interact with her by becoming alert, changing their breathing, and calming. During kangaroo m(other) care, the baby also often attempts to come to alertness and look at the m(other) 's face. The Family Nurture Intervention (FNI) program encourages the m(other) to use emotional language and share emotions to develop an emotional connection while touching and holding skin to skin in the NICU. (40, 41) These studies have demonstrated improvement in the baby's behavior and brain organization and a reduction in m(other)s' depression. (42-44)

For professionals who provide caregiving, watching the subtle and not-so-subtle physiologic, motor, and state behavioral responsiveness to language, caregiving, or other therapeutic interventions will assist the baby in feeling "heard." Professional-to-baby communication will be facilitated by observing, understanding, and responding to the baby's behavioral language.

Reflection: An essential component of seeing the baby as a competent interactor is to reflect on the baby's experience and the parents' experience. In order to have a thoughtful perspective on a baby's experience, parents and professionals can take the time to routinely sit to watch the baby and identify what the baby is communicating in response to the environment, caregiving, procedures, or when they are sleeping. Taking the time to imagine what the baby is feeling and responding to every breath, movement, and color change will give a window to the baby's experience.

"All babies deserve to be heard, understood, and responded to appropriately. What is needed to have a 'conversation' with the competent baby interactors in your unit? It is powerful to be heard and responded to, even if the language is not verbal but behavioral. The resulting conversations will reward you, the parents, and the baby."

Parents typically have insights and reflections about their baby's communication and can help the professional to know the individual responses that might not be readily visible. As parents are the most familiar and invested people in their baby's lives, they will have essential insights into how their baby communicates.

Final thoughts on the baby as a competent interactor:

Some suggestions to help with understanding the baby as a competent communicator and interactor.

- Sit undisturbed and watch the baby for a while. Note what happens when there is sound, activity, caregiving. How does the baby respond?
- As yourself what the baby is telling you about his or her experience with caregiving, the environment, the procedures?
- When you interact with a baby, ask yourself what the baby's experience of being a competent social partner is and how did you know?
- As your self if you can identify what the baby is telling you about their developmental or social interaction goal.
- Watch an interaction between the baby and their m(other) and another time with a staff member. See if you can tell what is the baby's experience was like when with the mother, when with the staff, and when they are alone.

Babies each come to us with their own unique behavioral "language" and, when supported, can be effective communicators and competent interactors. When we do not know the baby's language, it is hard to understand them and to respond in a supportive way. Without focusing on or accurately interpreting what the baby has to say, we risk not understanding their experience. Miscommunication often results in missed opportunities for meaningful and robust development. The baby whose behavioral communication is ignored, bypassed, or talked over during conversations may begin to understand that their attempts to tell of their experience are not essential. After so many attempts at being heard, learned helplessness may ensue, and the baby may "give up" on being an effective interactor. Imagine an adult with a visual deficit has a medical appointment, and the driver accompanying the adult is talked to rather than themselves. Or when in rounds, nurses are asked how the baby is doing without acknowledging that the m(other) is there and knows best what is going on with her baby, so the baby might feel that their communication is not valued or heard.

All babies deserve to be heard, understood, and responded to appropriately. What is needed to have a "conversation" with the competent baby interactors in your unit? It is powerful to be heard and responded to, even if the language is not verbal but behavioral. The resulting conversations will reward you, the parents, and the baby.

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