Educational & Developmental Intervention Services (EDIS) Personnel Development

KIT

Keeping In Touch

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UNDERSTANDING INFANT MENTAL HEALTH

Resource Article

Infants demonstrate stress in a number of visible ways. They cry, tense their muscles (arch their backs, splay fingers), look away from a caregiver's face, become disengaged, start to hiccup or yawn repeatedly, to name a few. What we don't see is the changing brain chemistry that happens when they become stressed. In response to stressors, the infant's brain kicks of a series of biochemical neurological events that result in the increase of the stress hormone, cortisol, in the infant. Adults experience a similar series of responses to stress. The flight or fight response adults experience in response to stress is caused by increased stress hormones. While adults do not always opt for a fight or flight response, it is because over time we have learned to adapt and handle stressors based on our past experiences, knowledge, and supports. Infants do not have these resources and as such are more prone to the consequences of increased cortisol levels as a result of repeated and/or significant stress.

In their article, *Examining Infants Cortisol Responses to Laboratory Tasks Among Children Varying in Attachment Disorganization: Stress reactivity or return to baseline?* Bernard and Dozier (2010) provide a compelling argument for the buffering effects of maternal care on infant stress reactivity. They examined the association between attachment disorganization and cortisol reactivity in response to one of two experimental tasks: the Strange Situation followed by a play time or play time followed by the Strange Situation. In this way they counterbalanced the experimental tasks which allowed for a more systematic analysis of observed changes in cortisol levels.

Participants included 32 infants, ranging from 11.3 months to 20 months of age, and their mothers (only one father participated), with a gender breakdown of 19 girls (59%) and 13 boys (41%). Participants learned of the study from community day care programs, local Mother's groups, and through announcements posted at the local university website. Race of family consisted of 22 (69%) White/non-Hispanic, 5 (16%) African-American, 2 (6%) bi-racial, 2 (6%) Hispanic and 1 (3%) Asian-American. Also of note, 88% of participants were married and 84% had completed college and/

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or/and advanced degree. The range of family income was under $10,000 to over $100,000, yet the majority (53%) earned more than $100,000.

The procedures included home and clinic measures of cortisol levels and the two experimental tasks: (1) participation in the Strange Situation (Ainsworth, Blehar, Waters, & Walls, 1978) with a short break immediately following; and (2) a period of free play with the parent of the child in a play room with toys. The 80 minute clinic visit included 40 minute videotaped sessions of the Strange Situation plus short break and the period of free play with their parent. One group experienced the Strange Situation/break before the period of free play and the other group had the reverse order of tasks. Five cortisol samples were taken: the first at home (baseline); the second at clinic arrival; the third at 40 minutes post arrival and after either the Strange Situation/break or free play task; the fourth at 65 minutes post arrival **and** in between the controlled situations; and the fifth at 80 minutes post arrival and following the period of either free play or the Strange Situation/break. The amount of time expected to accurately capture the change in cortisol levels in response to stressors is 20 minutes post exposure and this would be expected at the 3rd and 5th samplings.

For the Strange Situation, the researchers used the standard protocol in which the children experience a novel setting, interaction with a stranger, and brief separations from their parents. Videotapes were used to code the infants' reactions to the experience as either secure, avoidant, resistant, or disorganized. Attachment coding in response to the Strange Situation lead to the following results: 44% as secure, 25% disorganized, 25% resistant, and 6% as avoidant. However, for the purposes of this study an disorganized versus organized categorization system was used. The correlation of demographic information was examined. However, caregiver age, ethnicity, marital status, education level, child age, and child ethnicity appeared to have no influence on the type of attachment coded.

The study results indicated that children classified as disorganized attachment showed significant increased cortisol levels after the Strange Situation as compared to the cortisol levels taken after the free play situation. Children with organized attachment classification showed no significant difference in cortisol changes dependent upon task. Another significant finding was that as attachment disorganization increased (e.g., arrival at the clinic), cortisol levels decreased. Although unanticipated, this finding is similar to those of previous studies. The researchers specifically noted that, "A growing body of literature suggests that atypically low levels of basal cortisol and flattened daytime rhythms may be indicators or risk for later health problems, antisocial behavior, aggression, and anxiety disorders (p. 1776)." And results showed that an unusually high proportion of children were categorized as disorganized, the authors note that in fact it, "… may have increased our ability to detect the reported effect within relatively small sample size" (p. 1776). Replication of this study, for this reason and because of the small sample size, would be important to further our understanding on cortisol levels and its effects on infant development.

The results from this study support that children with disorganized attachments respond to stress differently than their organized peers. Children with disorganized attachment have increased cortisol reactivity when exposed to stress. Furthermore, children with organized attachment appear to handle stress without an increase in stress hormones. The question then becomes, "How do we promote securely attached children?" While the answer to this question is not exactly easy, early interventionists can play an important role in helping parents tune into possible signs of infant stress and supporting them with promoting quality attachments with their children.

Bernard, K. & Dozier, M. (2010). Examining Infants' Cortisol Responses to Laboratory Tasks Among Children Varying in Attachment Disorganization: Stress reactivity or return to baseline? Developmental Psychology, 46(6), 1771-1778.

What do the data say?

Why do parents parent the way they do?

The way parents parent their very young children has a direct impact on their children's development and learning. Parenting styles and approaches impact how children respond to others, develop relationships, approach learning, cope, solve problems, deal with challenges, behave, and respond to different stressors. The quality of parenting influences children's early and later mental health. In fact, the quality of parenting, marked by secure parent child attachments, can buffer children's reactions to stressful situations. Megan Gunnar, et al. (1996) explored this by studying the stress young children experienced during immunizations. Children's attachment was initially measured using the strange situation. As part of the immunization process these children's stress levels were measured by examining cortisol levels (the body's stress hormone) through saliva. The findings indicated that children with a good secure attachment seemed to manage the stress of immunization better than those who with a less secure parent-child attachment. Taken further, it seems that responsive quality parenting can buffer children's responses to stressful experiences (Kovan. 2012).

We know the quality of parenting impacts children's development. But what influences parenting approaches? Of course there is no simple answer to this complex question. Rather it is a compound interplay of life experiences, including the quality of parenting parents themselves experienced growing up, culture, and relationships. The influences of immediate relationships, the circumstances in which families live, the supports they have, the greater norms and expectations of society, as well as the values and beliefs instilled in their life all have an influence on parenting. There are however various environmental and individual factors that can put parents at risk for poor parenting. Environmental factors such as exposure to violence, unsafe neighborhoods, poverty, social isolation and individual factors such as mental health, depression, substance abuse, and challenged upbringing can put parents at risk for less than optimal parent practices. Parents who were abused as children are at a higher risk for becoming abusive. Yet, fortunately there are factors that can help break that cycle of abuse (Hudson, 2011). These include having supportive role models, participating in therapy, and receiving parenting support. As interventionists supporting families, it is important to remember that "parents were children once too" (Hudson, 2011).

Beyond environmental circumstances and individual parent experiences and mental health, children also influence parents' approaches to parenting. Each child has their own unique characteristics that can elicit different parenting approaches (Kovan, 2012). The age of the children, temperament, health, and general demeanor influences different parenting approaches. For example, a young infant with medical problems demands different levels of support and care than does a precocious toddler.

When thinking about why parents parent the way they do it is because of the unique interplay of environment, individual experience, and child characteristics that influence the difficult decisions parents have to make every moment of every day as they strive to nurture and care for their greatest treasure. When there are mental health issues, negative child rearing experiences, and other compounding circumstances it becomes even more challenging for parents to ensure ongoing quality parenting. On the up side, responsive support and positive influences can facilitate quality parenting.

When supporting families through early intervention to help them provide optimal learning opportunities for their children, begin the journey in the same place with the parents, get to know the parents, the children, and the social context of their parenting. Take the time to understand parents' values, beliefs, and desires for their children and family and respect their love for their children.

Gunnar, M.R., Brodersen, L., Nachmias, M., Buss, K., Rigatuso, J. (1996). Stress reactivity and attachment security. Developmental Psychobiology, 29(3), 191-204.

Hudson, L. (2011). Parents were children once too. *Zero To Three, 31*(3), 23-34.

Kovan, N. (2012). Influences on parenting. Center for Early Education and Development College of Education and Human Development University of Minnesota. Online Module accessed from: https://umconnect.umn.edu/p21666138/

Consultation Corner

From August 2015 through February 2016 we are excited to have Neal Horen, Kristin Tenney-Blackwell, Amy Hunter, and Rob Corso as our consultation corner experts addressing infant mental health.

Understanding Infant Mental Health

What about trauma?

Trauma is a big and complex topic. This article will offer a beginning introduction to trauma and its impact on young children. It is broken into two sections. The first section focuses on trauma, defining it and describing the potential impact. The second section focuses on resilience and strategies to promote protective factors. Also provided are ways to recognize the signs of trauma in young children and some tips for supporting young children and families who have experienced trauma.

Many children experience a variety of stressful or upsetting events. Not all stressful or adverse experiences cause a child to experience trauma, however. It is important to think about "What makes a single event traumatic for one child and not another?" Or, "What makes one event cause trauma and another seemingly "worse" event not cause a child to experience trauma?" Additionally, events or experiences that may cause a child to experience trauma or feel traumatized may be very different than what adults may perceive to be traumatizing.

Stated simply, child trauma occurs when children are exposed to events or situations, **and when this exposure overwhelms their ability to cope with what they have experienced**. http://www.nctsnet.org/content/defining-trauma-and-child-traumatic-stress

A critical component to the definition of trauma is that the experience or series of experiences overwhelms a child's ability to cope. A traumatic experience may be a single event, a series of events or a chronic condition. The experience of trauma is highly individualized. A traumatic event is not an isolated event perceived equally by those who experience it. In other words, what is traumatic to one child may not necessarily have the same impact on another child. Similarly, what adults may perceive as traumatic may be very different from what a child perceives as traumatic. Traumatic experience includes domestic violence, loss of a parent, changes in caregivers, natural disasters and many others. For example, a parent may believe the loss of their home during a hurricane is most traumatic; however, a young child in the same family may be most upset by losing his cat that ran away during the storm. Often what children are most upset by is very different from what adults may believe is most upsetting. For this reason, **it is critical to attempt to understand the unique meaning of children's experiences.**

What contributes to trauma?

A number of factors determine how impacted an individual will be from a traumatic event. These factors are described using the example of a car accident.

- History of previous trauma: An individual who had a previous severe car accident may be more likely to be traumatized (i.e. develop mental health problems) as a result of this car accident. Additionally, individuals with other previous traumas (i.e. death of a family

Consultation Corner (continued)

member, victim of violence/abuse, etc.) are also more likely to develop problems as a result of this car accident.

- History of mental health problems: Mental health problems such as depression, anxiety, and substance abuse may become worse after a traumatic experience.
- Impact or proximity of the experience: Individuals with significant loss (i.e. a family member's death, injury to self or others) as a result of the accident are more likely to have emotional or social problems after the accident. Individuals who had a near death experience as a result of the accident are also more likely to develop mental health problems. Individuals who were directly involved in the accident are more likely to develop problems than individuals who witnessed the accident and individuals who witnessed the accident are more likely to develop problems than individuals who heard the accident or were involved in traffic as a result of the accident.
- Family mental health problems: Individuals who had family members with mental health problems are more likely to develop mental health problems resulting from the accident than individuals with family members without mental health problems.
- Emotional response: Emotions such as extreme fear, guilt, helplessness, and shame negatively impact an individual's ability to recover from a potentially traumatic experience.
- Dissociation: A person experiences the feeling of being not being part of the accident (i.e. feels cut off from his body and his surroundings; feels numb to physical and emotional feelings; feels as if he is floating outside his body; and/or has no memories of the event) is particularly at risk of developing mental problems as a result of the accident.
- Temperament/outlook on life: Individuals who are "happy go lucky" or generally optimistic and are rarely phased by things may be less likely to develop problems than individuals who often negatively or frequently perceive themselves as victims in life.

Factors such as a child's support system, caregivers/family, temperament/personality, history, culture, and environment all have a great influence on how a very young child experiences the events that occur to him or around him. **Adults can help children from becoming overwhelmed by even very adverse or dangerous experiences. The help of adults is also critical when children have become overwhelmed and experienced trauma**. Traumatic events or experiences can be physical, emotional, social or sexual.

"An estimated 60 percent of children experience some form of potentially traumatic event or circumstance at some point in their development, according to US studies, and six to 20 per cent of them go on to suffer some form of impairment or post-traumatic stress disorder." http://www.preventionaction.org/prevention-news/nipping-trauma-bud/5603

Adverse childhood experiences (ACES)

Recent research has indicated that adverse early childhood experiences (ACES) not only impact the young child, but also may have long lasting effects into adulthood. These effects include increased likelihood to use drugs, alcohol, or tobacco; overeat; engage in sexual promiscuity; have an unwanted pregnancy; develop cardiovascular disease, cancer, or AIDS. Thus it is critical to be aware of young children's early experiences and the signs and symptoms of trauma.

Consultation Corner (continued)

Keep in mind that all of these signs and symptoms must also be considered in the context of a number of factors such as the child's history (is this a change?), culture, family, temperament, personality, and typical child development. Symptoms of trauma for young children often include eating and sleeping disturbances, clinginess, persistent self-soothing, difficulty focusing, aggressive behavior, regressive behavior, irritability, sadness, weight changes, nightmares, and fears in older children constantly reenacting the event.

Resilience

While childhood trauma is prevalent, children and families are also quite resilient. Resilience is defined as: recovering from or adjusting to misfortune or change; the ability to "bounce back" or overcome odds. With support young children can effectively cope with adverse experiences. Sensitive interventions can support brain development in early childhood.

Building resilience includes supporting young children's protective factors. Protective factors can be understood at four levels: child/individual, family, school, and larger community.

One of the most important protective factors for very young children is a stable, loving adult. This adult can be a family member, teacher, neighbor, grandparent, etc. Other protective factors may include, but, are not limited to:

- Strong family members who provide unconditional love (family)
- Positive trusting relationships outside of family (community/schools)
- Age appropriate social emotional competence (can share thoughts and feelings appropriately; responsible for actions (age appropriate); can manage impulses; shows compassion for others) (child/individual)
- Role models for behavior (family, schools, community)
- Access to support services and concrete assistance in times of need (community)
- Access to safe environment (community/school/family)
- Access to quality early care and education (community/school)
- Likable/easy temperament (child)
- Has a positive or optimistic view of the future (child)
- Attempts to solve problems appropriately (child/family/school)
- Able to solicit support from nurturing caregivers (child)
- Positive communication (family, community, school)
- Encouragement for positive behavior (family, community, school)
- Developing sense of humor (child)

At the individual level, resilient children are able to:

- engage in age-appropriate activities, such as going to school or participating in community or religious activities
- relate to others
- understand their family life, in particular, that they were not to blame.

At the family level, parents remain deeply committed to parenting, commonly saying things such as, "I will do what I need to do to take care of my child, even if I cannot do anything else."

Consultation Corner (continued)

At the caregiving/school level, schools and health centers were vital in building family strengths by providing care for those suffering from adversity. In other words, social supports and services were helpful and necessary to ensuring children were able to recover/bounce back from the adversity. At the larger community level, safe neighbor-hoods, strong social ties, and shared purpose can build resilience (Fostering Resilience in Families Coping with Depression- Practical ways Head Start Staff can Help Families Build the Power to Cope, Family Connections, 2008).

One way to think about or visualize the concept of resilience may be to think of a scale. When protective factors outweigh risk factors children are more likely to have better outcomes. In other words, protective factors buffer or mitigate risk factors. There are a number of things you can do or suggest to others to do to assist with the development of protective factors. These include:

- **Hold, cuddle and rock children:** Touch is very powerful in helping children feel comforted, safe, and cared for. In fact, studies show babies and very young children need touch to survive- babies who were cared for (i.e. fed, changed, and provided safe shelter) yet not touched failed to develop normally. Touch can even play an important role in keeping us physically healthy by stimulating the immune system.
- **Respond gently & quickly to cues:** (smiles, cries, etc.) Children feel valued when their needs are met. When caregivers respond to children's gestures and language children learn that they are effective communicators. Having strong communication skills is an important protective factor.
- **Talk to children about their emotions:** Children who can express their feelings and needs are more likely to receive the support they need. Children who are able to express their feelings (i.e. their fears, worries, concerns, anger, guilt, sadness, etc.) in appropriate ways are less likely to develop problems as a result of a potentially traumatic experience.
- **Maintain a predictable schedule:** When a schedule is predictable children feel safe and secure. They can anticipate what is going to happen next. Think about how you feel when you are in control of your schedule and you know what your day is going to look like (i.e. think about how you feel when you know where you need be, how long it takes you to get from one place to the next, what time things are going to happen, who is going to be there, when food will be available, when you will have a break, etc.). Maintaining a predictable schedule can help children relax, reduce their worry and direct their energy to learning and exploring.
- **Provide choices so children can control some aspects of the daily routine:** Young children have very little opportunity to exert control in their lives. Providing age appropriate choices such as, "Do you want apple slices or banana slices?" or "Do you want two slices or three slices?" or "Do you want the red shirt or blue shirt?" can help children feel they have some control in their lives. This may be especially important if other aspects of their lives feel particularly out of control.
- **Provide a safe place for the child to talk or just relax:** Many children today have very busy lives. Some children have irregular bedtimes and/or have trouble sleeping through the night. Some children have significant fears and worries. Providing children with down time to sit with a nurturing adult or relax may be just what a child needs.

Overall, your role is critical in essentially tipping the scale in favor of protective factors. Being aware of the signs and symptoms of trauma, knowing the potential long terms effects and having a strong referral network are critical. Sharing suggestions with families for building protective factors can go a long way in building a child's resilience.

On the WWW

Have you ever wondered what it might be like to have a learning disability - difficulty with reading, writing, attention, math or organization skills? These are real issues that some children have to deal with as they work hard to keep up in school and everyday life.

Experiencing these first hand through simulation activities can be helpful for adults to understand the very real challenges that some children experience. . "Through your child's eyes" is part of the Understood for learning and attention issues program and includes a variety of simulation activities that allow adults to experience what it might be like to have reading, writing, attention, math, or organization issues.

It's a great tool for parents and teachers to understand how hard it can be for some children.

The link to these simulations is:

https://www.understood.org/en/tools/through-your-childs-eyes

Continuing Education for KIT Readers

The Comprehensive System of Personnel Development (CSPD) is offering a continuing education opportunity for KIT readers.

In line with the focus on *Understanding Infant Mental Health,* readers are invited to receive continuing education contact hours for reading the monthly KIT publications (August 2015 through January 2016) and completing a multiple-choice exam about the content covered in these KITs.

KIT readers will receive the exam in February 2016. There is no need to register for the CEUs. Rather, if you are interested complete the exam online at www.edis.army.mil

Upon successful completion of the exam, you will receive a certificate of non-discipline specific continuing education contact hours.

KIT Newsletters are available online at **www.edis.army.mil**