

UAIMH Newsletter

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Editor: Judith Ahrano Kittel

Technical Editor: Mary Ellen Heiner

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President's Corner

Incoming President, Ilse DeKoeper-Laros: Gearing up for UAIMH's Next Decade!

What an incredible honor to become UAIMH's new President precisely during the year of our 10th anniversary! Exactly 10 years ago, in May 2003, we published our very first newsletter. At that time, Janet Wade (of BabyWatch Early Intervention) had seen the need for spreading more awareness and education about the importance of early development. During these 10 years, we have organized many educational events (small workshops and mini-conferences) and we plan on continuing this mission. Since we started, we have seen the birth of another great initiative to support early development in *Help Me Grow*, which we will learn more about in this newsletter. Now, UAIMH is gearing up for the next decade.

My involvement in UAIMH has included being the Treasurer and Newsletter Editor, as well as a founding Board Member. From the start, I was passionate about improving the well-being of little ones who do not yet have a voice of their own. Not having children at the time, I was of the opinion that parents had the power to make this early period into a safe and nurturing time. While I recognized that this is not an easy job for parents, I was still under the impression that parents had the ability to choose how to act in their infant's best interest—laying the groundwork for a healthy development later.

And then...I became a mother myself! I had my son in 2006 (and became less involved in UAIMH as I was very focused on adapting to my new life and role). As Nick Tsandes described in his President's Corner of May 2005 ("The Transformation of a President"), having a child is a transformational experience. With the

birth of a baby comes "the birth of a mother" or father (Stern & Bruschiweiler-Stern, 1998).

Recently, I met a young woman and her 3-month-old baby. I asked her how she was experiencing motherhood so far. She told me that it reminded her of a quote that she had read from Elizabeth Stone, "Making the decision to have a child is momentous. It is to decide forever to have your heart go walking around outside your body." These are beautiful words, illustrating the invisible bond that most parents feel after having their first child.

Recently, I enjoyed some of the joys of motherhood during Mother's Day. Just weeks earlier, I was pondering what makes me happy. I pictured myself in a nice park, such as Memory Grove, sitting under a tree, just relaxing.... My son said, "Mom, we should go to Memory Grove for Mother's Day, 'cause it will make you happy!" So we went, brought a simple lunch, and sat in the shade of a tree. Then my son pulled out the gift that he had put together with his daddy and I was surprised and touched—they had some excellent chocolate (which my son had wanted to buy with his own pocket money) and a sweet handmade card. The entire day I received plenty of hugs, smiles, and love. It was a perfect day and I was very happy to be the mother of such a beautiful child.

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"Making the decision to have a child is momentous. It is to decide forever to have your heart go walking around outside your body."

Elizabeth Stone

Many days in the life of a mother (or father), however, are far from perfect. We spend sleepless nights, break up fights, clean up after our children, have to plan and organize all the time, work to get food on the table, and so much more. You are “on duty” 24/7 and it never ends! Having a young baby was not easy for me. I was continually sleep deprived and often felt helpless and alone, despite all my knowledge, connections, and a supportive husband. There is no way to predict how you will feel after baby has finally arrived...and we cannot do it alone!

I believe that parents need support when they have a baby. Support should be available to all new parents, and this is especially true for those in challenging situations (such as living in poverty). Under the direction of Jack Shonkoff, M.D., the *Center on the Developing Child* at Harvard University has recently started to highlight the need to help the adults around the young child, in order to help the children develop optimally. Shonkoff and his colleagues have done much work on the dangers of toxic stress (you will read a research update about this in this edition of the UAIMH newsletter). Toxic stress is enduring and all-pervasive and it affects a young child’s developing neuro-architecture. As the Harvard experts said:

“Early experiences are literally built into our bodies, for better or for worse, and the influence of the early years can affect a lifetime of learning, behavior, and health.” (Frontiers of Innovation, n.d.)

In my next few years as UAIMH President, I would like to focus on helping parents help their little ones. When parents feel supported and nourished, they can support and nourish their children and help them be healthier and happier. Another goal will be to involve more young people in our mission so that we can expand our reach and initiative. Finally, I hope to continue our educational efforts and offerings!

Toxic stress is enduring and all-pervasive and it affects a young child’s developing neuro-architecture.

As I embark on this new journey, I would like to thank those who have been building UAIMH in the past 10 years. First, I want to offer a big thank you to Janet Wade (formerly of *BabyWatch Early Intervention* and now Director of Utah Services at *Easter Seals Goodwill Northern Rocky Mountain*). Janet laid the original groundwork for the foundation of UAIMH by bringing together a group of people wanting to improve the well-being of little ones, initiating our organization, working on the bylaws, and getting us affiliated with the World Association for Infant Mental Health. I am grateful for her relentless energy and continuing work on this mission.

Next, I want to thank all of the previous UAIMH Presidents, who have all been very inspirational. Thank you, Susan Dickinson, M.S. (of CSHCN) for your efforts in the past 2 years in improving reflective supervision for those who assist infants and their caregivers and all your other work for UAIMH. Thank you also to (in reverse order of presidency): Judith Ahrano Kittel, M.D., F.A.A.P.; Vonda Jump, Ph.D.; Aziele Jensen, M.Ed.; Adrienne Akers, M.S., R.P.T.; Jessica Singleton, Ph.D.; Nick Tsandes, L.C.S.W.; and Kristina Hindert, M.D., the founding President. All of you have helped to build UAIMH little by little. I hope to see you again in this anniversary year and celebrate 10 years of UAIMH, along with everyone else who wants to improve things in the lives of little ones in Utah!

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*Ilse DeKoeper-Laros, PhD
Adjunct Assistant Professor
Department of Psychology
University of Utah*



A Message from our Past President: Susan Dickinson

Ilse DeKoeper-Laros, Ph.D., comes to UAIMH presidency as one of the founding board members and as a professor of psychology. I worked closely with her this last year for our conference on Conscious Parenting and experienced her never-ending energy, firm commitment, sense of humor, and collaborative skills during the long arduous process. I am thrilled Ilse is assuming the presidency, as her forward thinking will bring an enlargement of perspectives. I will continue working as an active board member, supporting our community outreach through the Newsletter, community conferences, as well as serving on agency committees.

I feel privileged to have served these last two years as president of UAIMH and wish to honor the hard work and accomplishments we have made as a group. Our focus on reflective practice and mindfulness culminating in the successful conference, *The Conscious Parent*, presented by Shelfali Tsabary, Ph.D., was timely.



I appreciated the opportunity to honor Agi Plenk, Ph.D., founder of The Children's Center through a conversation published in our newsletter. As I was in that process with her, she stated with irritation, "I don't want to take time to be honored; we have too much work to do." Her death came a few months later. Her life's work continues to provide inspiration as we reach for clearer perceptions and greater knowledge of children and their families. The Adverse Childhood Experiences (ACE) study has now documented what we have sensed clinically for years—the long-term negative consequences of different levels of trauma and neglect (www.acestudy.org). I hope you take the opportunity to review this seminal longitudinal study, if you have not yet done so.

I think you will find this issue intriguing and practical as we embark on greater understanding of toxic stress and trauma and the affects and needed treatment approaches.

*Susan Dickinson, MS
UAIMH Past President 2011-2013
Pediatric Psychology Children with Special
Health Care Needs (Utah Department of Health)
Psychological Consultant for Reflective
Supervision to Southeastern Early Intervention
(Utah State University)*



Early Developmental and Behavioral Screening and Help Me Grow: Finding Resources for At-Risk Children and Their Families

Introduction

Research has proven the efficacy of early developmental screening in detecting children at risk for developmental delays and improved outcomes with early intervention. More recently attention has been directed toward the early use of behavioral screening and early intervention for children at risk for mental health problems. Interventions now under study include enhancing protective factors in at risk children and their families (Center for the Study of Social Policy, 2012). A concern frequently raised by professionals is the question of once identified, where can young children be referred for intervention (Honigfeld & McKay, 2006)?

What is Help Me Grow?

Help Me Grow is an innovative, cost-effective, and user-friendly information and referral line designed to identify children at risk for developmental or behavioral problems. The line has existed in Utah County since March 2010 and is currently expanding statewide. The information line connects families and providers to appropriate community resources in a timely manner. Through a central number, families can initiate a process that takes children from screening

to accessing appropriate community resources to case follow up.

“A concern frequently raised by professionals is the question of once identified, where can young children be referred for intervention”?

Child health care providers are in a powerful position to promote cross-sector collaboration with early care, education, and family support organizations. *Help Me Grow* actively works with them to reach

families in need of community-based resources by offering providers four primary services.

How Help Me Grow Helps Primary Care Providers

Free developmental screenings for patients. *Help Me Grow* also offers families a free developmental screening tool—the Ages and Stages Questionnaire (ASQ). If a practice does not currently use a screening tool, the primary care provider can direct his or her patients to *Help Me Grow*. In turn, *Help Me Grow* sends the parents an age-appropriate ASQ, scores the screening, reviews the results with the family, and faxes all information (with the parent’s permission) to the physician. This way the physician stays fully apprised of his or her patients’ interaction with *Help Me Grow*. Please refer to the website <http://agesandstages.com/> to see specifics on the ASQ screening.

A time-saving information and referral service. A team of trained care coordinators is ready to offer providers and families information on any number of resources, including information topics from bonding to sleep and temperament. When a child needs a more substantive intervention, *Help Me Grow* can refer families to community-based services including: (a) developmental disability and intervention programs; (b) behavioral and mental health services; (c) early childhood education and child care programs; (d) family support services; and (e) child advocacy and legal services. *Help Me Grow* staff also follows up to confirm that families

successfully connect with recommended services saving time and money spent locating resources and ensuring a good fit for families.

A dynamic community resource database. To date, *Help Me Grow*’s rich resource database, accessible to anyone online, boasts over 700 programs throughout Utah and Salt Lake Counties and is currently working to provide a comparable directory for counties throughout the state. *Help Me Grow* can assist professional practices to develop a personalized “refer for service” list for quick office use.

Recertification of medical home credentials. The National *Help Me Grow* team has developed an American Board of Pediatrics-approved, Part 4 Credit Quality Improvement Project for primary care practices located in *Help Me Grow* states. It is geared specifically toward practices interested in evaluating (a) their method of developmental surveillance and screening, and (b) their approach to connecting children to services using *Help Me Grow*. To learn more about this project, visit <http://helpmegrownational.org/pages/hmg-maintenance-cert.php>.

...the physician stays fully apprised of his or her patients’ interaction with Help Me Grow.

How to Connect to Help Me Grow

Accessing *Help Me Grow*’s free services is simple. Simply dial 2-1-1 and ask for *Help Me Grow* or call 801-691-5322 to speak directly with a specialist. For more information on *Help Me Grow* and how you can better the lives of the families you treat, visit <http://www.helpmegrowutah.org/>

Conclusion

By using the *Help Me Grow* system to facilitate referrals and provide care coordination, professionals can screen more readily and families who need services can be connected more effectively.

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Robin Lindsay, MSN, FNP
Pediatric Outreach Manager
Help Me Grow
United Way of Utah County
robinl@unitedwayuc.org
Phone: (801) 691-5324



Trauma and Child Mental Health

Part of the human condition is that we work to avoid seeing trauma. On any given morning we pick up the paper, or we listen to the news, and we may or may not have the emotional reserves to handle reading yet one more article about a child being sexually abused. As therapists, although we are fully aware that children are traumatized, we struggle to hear the horrendous stories about abuse. When parents reach out to us for help they

“As therapists, although we are fully aware that children are traumatized, we struggle to hear the horrendous stories about abuse.”

often present the child’s behavioral problems. They too, want to believe that the “bad things” could not really be responsible. For if

the trauma is the root cause, then the parent may have more to feel guilty about in a world where there is already too much parental guilt.

The Children’s Center is now on our second round of federal funding that allows us to partner with the National Child Traumatic Stress Network. As part of our new grant we have developed and initiated a brief trauma screener that is given to every family who seeks our services. The parents and caregivers almost seem relieved to have a means to report to us their concerns! The first half of the screener lists common traumas that

impact very young children (e.g., witnessing domestic violence, physical abuse, sexual abuse, and separation from a caregiver). We added an “other” category that has been completed with responses such as “divorce” or “recent autism diagnosis.” This provides a clear signal for the clinician to look more deeply into the parent’s feelings about those issues. On average we are finding that the children who have experienced trauma have actually experienced upwards of three separate traumatic events.

The second half of the screener asks the parents to provide information about the child’s symptoms since the traumatic event. For example, temper outbursts, sleep disturbance, or appetite issues. In just minutes the parents are providing us with critical information about the child’s trauma history and current symptomatology. Screening is the first step toward becoming a trauma-informed agency or clinical practice. We are happy to make the tool available to clinicians at no cost! Please email our Project Director, Brian Miller, BMiller@tccslc.org. He will be happy to send you a copy.

Douglas F. Goldsmith, PhD
Executive Director and Chief Psychologist
The Children’s Center



Toxic Stress and Mental Health

Toxic stress in infancy and childhood is defined as the extreme, frequent, or extended activation of the stress response without the concomitant, consistent buffering, and support of a caring adult. Risk factors are neglect, abuse, extreme poverty, family violence, substance use, parental addiction, family mental health problems (high risk), and parental death. Abuse can be physical, mental, verbal, emotional, or sexual in nature. A strong buffering source is a nurturing, caring, consistent relationship with an adult who provides the power to counteract the adverse effects of toxic stress. The negative health outcomes in adulthood from exposure to unmitigated chronic toxic stress through childhood are astounding.

A sentinel study, the ACE study, published in 1998, by the Department of Preventive Medicine, Kaiser Permanente, San Diego, investigated health risk behavior and adult disease and their relation to childhood exposure to emotional, physical or sexual abuse, and household dysfunction.

Abuse can be physical, mental, verbal, emotional, or sexual in nature.

A questionnaire was sent to 13,494 adults who had had a standardized medical exam (response rate 70.5%). Categories studied were “psychological, physical, or sexual abuse; domestic violence against the mother; substance abuse; mental illness, suicidal, or imprisonment.” These categories were then compared to measures of adult “risk behavior, health status, and disease.” More than half of the participants reported one exposure and a fourth reported two or more exposures. Adults who reported four or more episodes had 4-12 fold increase in health risks (e.g., alcoholism, drug abuse, depression, and suicide attempt); a 2-4 fold increase in smoking, poor self-rated health, greater than or equal to 50 sexual intercourse partners, sexually transmitted disease, and a 1.4-1.6 times increase in physical inactivity and severe obesity. The number of categories of adverse child events “showed a graded relationship to” adult medical illness and disease (heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease), which are leading causes of death in adults (Felitti et al., 1998).

Since the late 1990s, the biomedical science of toxic stress has been more clearly elucidated biologically through ongoing research in the neuro-endocrine-immune biology (the NEI network) of the stress response, also referred to as the hypothalamic-pituitary-adrenal (the HPA) axis. The impact of stress activates a cascade of action by pro-inflammatory cytokines, which triggers a biologically programmed pathway that produces loss of appetite, fatigue, social withdrawal, depressed mood, irritability, and poor cognitive functioning. Stress also has a role in depression, aberrant behavioral regulation, and post-traumatic stress disorder (PTSD) in children and adults.

The immune system develops throughout pregnancy

and during the first year of life. Environmental input influences the response and the function of the developing immune system during pregnancy and after birth. This may establish an early base for vulnerability to health problems. The changes in the cellular immune response to toxic stress increase the risk for infectious disease, chronic disease, and disrupt cognitive, learning, memory, behavioral function, and emotional behavioral regulation. Studies have been conducted with primate models that showed poor immune development at the cellular level and decreased disease resistance when they were reared in a nursery compared to those reared by their mother. The decreased immune resistance continued even after all of the monkeys were placed in identical living conditions with a supportive adult. There is similar evidence in humans. Exposure to the risk factors of poverty, intimate partner violence, and community violence, lead to health impacts throughout life that are manifested in asthma, metabolic syndrome, hypertension, insulin resistance, obesity, type 2 diabetes and cardiovascular disease (Johnson, Riley, Granger, & Riis, 2013).

Since the mid to late 1990s, there has been rapid growth of convergent research-based knowledge in the fields of neuroscience, the behavioral sciences, mental health services, sociology, and medicine. These have provided valuable and increasingly refined information regarding health outcomes in adulthood of children exposed to chronic toxic stress through their development—

from the time of conception. It is clear that a coordinated multidisciplinary, science-based effort to reduce

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toxic stress in the developing fetus, infant, and child is imperative for addressing chronic physical and mental health disorders that impact individuals, families, and communities. There are now several states (i.e., Wisconsin, Michigan, Ohio, California, Florida, and Louisiana) that have gathered together the joint support and involvement of the stakeholders (professionals, local and state agencies, child care services for children

and families, as well as comprehensive health care services) to develop the appropriate reimbursement pathways necessary to address these problems in a comprehensive, consistent, coordinated, and effective manner.

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Judith Ahrano Kittel, MD
Developmental Behavioral Pediatrician



Toxic Stress Before Birth: Will it Affect the Developing Child?

“Will my child be healthy?” “Will I be a good mom?” “I’m scared of giving birth...” Anxious emotions and stress are normal and expected during pregnancy and do not have to be harmful for the unborn baby. But can stress be too high, too pervasive, and toxic, even before birth? Research suggests it can, even though more research is needed to learn more about what types of stress is harmful, which other factors play a role, and which are the mechanisms through which stress may affect the child in the womb.

In an extensive review of the literature, Talge and colleagues (2007) summarized a large collection of studies on prenatal stress, anxiety, and depression. Studies varied in their sample size and methods used. In general, however, high levels of stress, anxiety, or depression during pregnancy were associated with:

- prematurity and low birthweight, which are in themselves risk factors for later (social, cognitive, and physical) development;
- lower scores on newborn neurobehavioral tests;
- more difficult temperament at 4 months;
- lower scores on infant mental developmental index, language tests, and grades in school; and
- ADHD problems, as well as anxiety and externalizing problems in childhood and adolescence.

Prenatal Depression

Focusing in on depression specifically, Tiffany Field found that infants born to prenatally depressed mothers were more stressed and less able to focus their attention, for example on adults’ facial expressions (Field, Diego, & Hernandez-Reif, 2006). They also showed brain patterns characteristic of chronically depressed adults (i.e., relatively more activity in the right brain hemisphere). Further, these newborns had more of the stress hormones cortisol and norepinephrine in

...infants born to prenatally depressed mothers were more stressed and less able to focus their attention...

their blood than other newborns. Field and colleagues concluded that these newborns had a harder time self-regulating as compared to infants born to nondepressed mothers.

Another study, conducted in Finland followed a group of 147 children from before birth until 8 or 9 years of age (Luoma et al., 2001). The researchers measured maternal depression several times: in the third trimester of pregnancy, during the newborn period, at 6 months, and when the children were 8 or 9 years old. Children of mothers with higher levels of depression showed more behavior problems at every age. What surprised the researchers was that prenatal depression was the *only* significant variable that predicted 8- and 9-year-olds' behavior problems, when all other potential predictor variables were statistically controlled (that is, maternal depression at every age after birth, maternal education, marital status, and socioeconomic variables). The worst-case scenario with respect to child behavior problems occurred when the mother showed

Prenatal depression was the only significant variable that predicted 8- and 9-year-olds' behavior problems.

depressive symptoms both before and after the child's birth (up until 8 or 9 years of age). The researchers concluded that mothers' depressive symptoms were a risk factor for child well-being at any age, but especially prenatally.

Maternal Prenatal Anxiety and Stress

An increasing amount of studies have investigated the role of maternal stress and anxiety on the developing child. All of these studies assessed maternal stress and/or anxiety during the mother's pregnancy (mostly during the third trimester), although their methods and the particular type of stress or anxiety varied. For example, some studies focused on stressors such as natural disasters, while others focused on all kinds of psychological stress (usually more chronic stress). Variations in design and methods can make it hard to come to some general conclusions. However, most of these studies did find relations between prenatal stress and later development of the child.

In general, babies whose mothers had been more stressed or anxious during pregnancy showed more developmental problems than did babies of more relaxed mothers.

In the first year of life, these babies were likely to have a difficult temperament (e.g., being

Interestingly...pregnancy-related fears (such as fear of giving birth) were especially strongly related to infant developmental problems.

unadaptable and difficult to soothe), to have problems regulating their attention, and to be slower in motor development (Brouwers, Van Baar, & Pop, 2001; Van Den Bergh, 1992). Interestingly, one study found that pregnancy-related fears (such as fear of giving birth) were especially strongly related to infant developmental problems (Huizink et al, 2003), though it was not clear why. All of these studies were well designed and took into account several other risk factors that may have affected the children's development (such as, low birthweight, smoking during pregnancy, maternal postnatal anxiety/stress, and low socioeconomic status).

Developmental problems in the preschool years have also been related to prenatal anxiety. In one study, 22% of 2 year olds from prenatally anxious women had a developmental delay of 3 months, as compared to only 6% from nonanxious mothers. A study in Great Britain, investigating over 7,000 mothers and children, discovered that prenatal maternal anxiety is related to child behavior problems at 4 years of age (Glover, 1997). The 15% of most anxious women were three times more likely than other mothers to have a child with behavior problems, such as hyperactivity/inattention, at age 4 years. The findings were strongest for boys.

The effects of prenatal maternal anxiety and/or stress may last until middle childhood and adolescence. The Belgian researcher, Bea Van den Bergh, followed a group of 70 mothers and their firstborn children, from before birth until the children were 14 to 15 years old (Van den Bergh, 1992; Van den Bergh et al., 2005). Even when controlling for the mothers' postnatal anxiety and other risk factors, prenatal maternal anxiety significantly predicted attentional and emotional self-regulation problems (such as attention problems,

The effects of prenatal maternal anxiety and/or stress may last until middle childhood and adolescence.

hyperactivity, and self-control) around age 8 years and again around age 15. Again, the results were especially strong for boys' self-regulation problems.

For girls, postnatal maternal anxiety and other postnatal factors were stronger predictors.

Possible Explanations for Pre- to Postnatal Continuity

Patterns of emotional and attentional self-regulation (and problems with these important skills) may begin to develop prenatally (DiPietro et al., 2003). If there is a connection between the mother's emotional well being during pregnancy and her child's future mental health, how can this link be explained? Several explanations have been proposed (Van den Bergh, 1992).

First, mothers and their children share genetics. Therefore, any link between prenatal stress and later child problems could be due to similar genetic risk (and not to the stress the mother experienced during pregnancy). An intriguing and innovative recent study was able to isolate the variable of shared genetics in a sample of approximately 500 mothers who had conceived their children via In Vitro Fertilization (IVF; Rice et al., 2010). The researchers compared children who were conceived from donated eggs versus children who were genetically related to their mothers (and/or fathers). Interestingly, they found that children (aged 4 to 10 years old) of mothers who were more stressed during pregnancy prenatal were at higher risk for premature birth, low birthweight, and antisocial behavior problems in childhood, regardless of their genetic relation to their mother. The study also found that prenatal stress related to later ADHD symptoms *only* in children who were genetically related to their mothers. This study, although it looked at prenatal stress retrospectively, gives further evidence for the negative consequences of high stress during pregnancy.

Second, maternal stress, anxiety, and depression can cause pregnancy and birth complications, which would

then affect the developing child. However, the majority of studies have only studied healthy mothers with normal pregnancies. Third, mothers who are anxious, stressed, or depressed during pregnancy often continue to be so after birth. The long-term studies by Luoma and colleagues (2001) and Van den Bergh and colleagues (2005) both showed that the women who were depressed or anxious during pregnancy tended to stay depressed or anxious throughout the child's life. Although these studies statistically checked the influence of postnatal depression and anxiety on the children's behavior, it is difficult to tease out the relative effects of prenatal versus postnatal depression and anxiety. It is quite likely that children whose mothers were continuously depressed, anxious, or stressed, develop most problems. For example, Luoma and colleagues found that children with mothers who were depressed both before and after birth had the most behavior problems at age 8 or 9.

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Another explanation suggests that the mother's emotional state might affect the development of the fetus directly, via physiological processes. Two ways in which this might happen are through restricted blood flow or stress hormones through the umbilical cord. A recent study found that blood flow was only moderately restricted when mothers reported higher levels of anxiety during pregnancy (Mendelson, Dipietro, Costigan, Chen, & Henderson, 2011). This study suggested that restricted blood flow may be a minor factor but not a strong explanation.

Stress hormones that pass through the umbilical cord could influence the neural architecture of the brain, specifically as related to stress regulation. Animal studies (and a few studies done with human infants) suggest that prenatal stress may affect the HPA-axis (important in stress regulation) as well as the cerebellum and hippocampus (Monk, Georgieff, & Osterholm, 2013). Smaller hippocampal volume is a risk factor for the development of disorders such as PTSD (Woon, Sood, & Hedges, 2010). Recent research has even

...mother's emotional state might affect the development of the fetus....

shown that prenatal stress, supposedly through higher levels of stress hormones, affects telomere length in children (Entringer et al., 2011; Entringer, Buss, & Wadhwa, 2012). Telomeres are found at the end of the chromosomes and consist of DNA-protein; they normally shorten with age. Shorter telomere length is associated with health problems and aging. Entringer and colleagues (2011) found that young adult children of mothers who had experienced a significant stressor during pregnancy had shorter telomere length than children of mothers who had uneventful pregnancies (also see <http://newphoenix.info/?p=3618>).

What Can We Do To Help Pregnant Mothers?

From all of the above, it is clear that stress can be toxic, even before the infant is born. When mothers are especially stressed, anxious, or depressed, their children are likely to be born prematurely, with low birthweight, and to develop problems in regulating their emotions, attention, and behavior. This seems to be independent of shared genetics (except for attention-hyperactivity problems; Rice et al., 2010).

To support strong infant mental health, it is clear that we need to start by helping mothers adjust well to their pregnancies. This should be done on many levels (societal, in the workplace, through the relationships around her, and on an individual level). Societal changes are hard to create, but infant mental health organizations are trying their best to promote such changes. A recent example is the *Center on the Developing Child* at Harvard University, led by Jack Shonkoff, which has recently started its Frontiers of Innovation program, aimed at helping adults so they can support their children's healthy development (see http://developingchild.harvard.edu/index.php/activities/frontiers_of_innovation/). Much can be done in terms of supporting maternal leave policies, etc. On a more individual level, we need to make sure that pregnant mothers have support. Community support, health care,

and fostering healthy relationships are all essential for healthy pregnancies.

Massage therapy might be another way for mothers to feel calmer during pregnancy. A meta-analysis of research studies found that weekly massage therapy (in nonpregnant adults) reduced anxiety and depression as much as weekly psychotherapy (Moyer, Rounds, & Hannum, 2004)! Massage therapy also reduced pain, which might be an added benefit for pregnant women. Several recent studies suggested that massage therapy can indeed

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be beneficial for pregnant mothers (Field, Diego, Medina, Delgado, & Hernandez, 2012). Of course, pregnant mothers would need a massage therapist who specializes in prenatal massage. Meditation is another noninvasive intervention that could help reduce stress in pregnant women. A recent meta-analysis found reductions in depression and anxiety symptoms in adults (in general) and especially in patients with mood and anxiety disorders (Hofmann, Sawyer, & Oh, 2010). Other relaxing practices, such as yoga, qigong, and tai chi, could also be helpful (Field et al., 2012; Oh, Choi, Inamori, Rosenthal, & Yeung, 2013).

We do need to keep in mind that the presence of maternal stress, depression, and anxiety does not necessarily mean that problems will arise (DiPietro, 2006). High levels of stress do increase risk for the child, however. Therefore the wisest course of action is to limit stress as much as possible. Just as it is important to maintain a healthy diet and to stay away from environmental pollution, it is important to support the pregnant mother and to keep her as happy, relaxed, and healthy as possible.

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*Ilse DeKoeyer-Laros, PhD
Adjunct Assistant Professor
Department of Psychology
University of Utah*



Announcements/Upcoming Events



UAIMH now has a Facebook page! Here we keep you updated on news,

events, etc. Please take a moment to “like” us at <https://www.facebook.com/UtahIMH>

Help Me Grow Utah regularly organizes events for parents, caregivers, and professionals working with young children. Please see their community calendar at: <http://www.helpmegrowutah.org/events/community-calendars>



October 28-29, 2013: Pre-Conference intensive workshop on Trauma-Informed Cognitive Behavior Therapy. Stayed tuned for more information.

October 30-31, 2013, Marriot City Creek, Salt Lake City: Critical Issues Facing Children and Adolescents Conference. Focus is on behavioral health (mental health and substance use issues) in children ages 0-18 years and their families. Special emphasis will be placed on helping professions dealing with youth on a regular basis, such as health and mental health, medicine, nursing, social work, psychology, psychiatry, pediatrics, counseling, substance abuse, education,

health education, paramedical, and emergency medical fields.

For more information on the Pre-Conference or Conference, or if you would like to be placed on their mailing list, please contact the ESI Management Group.

ESI Management Group
P.O. Box 1734
Draper, UT 84020
Phone: 801-501-9446
email: esi@esimgmt.org

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