We all experience stress. Yet, in our society stress and anxiety have a negative connotation. Both stress and anxiety can play an important role in our survival. The problem develops when they become maladaptive. We are seeing an epidemic of anxiety within our society and in particular in our children. Recent reports show that over $60 billion a year are spent on anxiety disorders. In the adult population it has had a profound impact on both direct health care costs and indirect health care costs such as lost wages related to missed work, decreased work productivity, and increase medical issues in chronic illness. The impact has also been seen in our children. Recent reports show a lifetime prevalence of anxiety disorders to be 25% in children 13 to 18 years of age. In conjunction, anxiety has been closely linked as a comorbidity in other behavioral conditions such as attention deficit disorder (ADD). ADD is a growing population of children in the United States with a prevalence of 9.4% and roughly 3,000,000 children being treated with medications. These numbers become even more concerning when we recognize the link between chronic illness and stress with it being a major contributor to common pediatric issues such as abdominal pain, headaches, and sleep disturbances. All of these
are closely linked. The magnitude of the impact that stress and anxiety has on children in the United States cannot be overstated.

What happens to our body with a stress response? We see significant changes in hormones in our body such as glucocorticoids, catecholamines, and also in inflammatory markers. The impact is seen in our cognitive function, sleep wake cycle, thyroid gland, and are immune response. Subsequently we see both acute and chronic conditions associated with long-term stress including allergic reactions, asthma, migraine headaches, chronic pain syndromes, panic attacks, hypertension, chronic abdominal pain, autoimmune disorders, cardiovascular disease, depression, metabolic disorders, and even obesity. In the past it was believed to be “all in the patients head.” We can now show clear links to the mind-body connection.

Neuroplasticity, the ability to actually change the nervous system, is well described and can be used as a treatment tool. In addition, new studies have shown we can even modify parts of our chromosomes by working on managing our stress.

Why have we seen such a dramatic increase in these conditions? Are we simply over diagnosing these conditions or is there truly an increase? There does seem to be an actual increase in these conditions. Parents are commonly finding their children grappling with more and more stress in their lives. These pressures increase the symptoms the child has and can have a profound impact on their life. The majority of the time, anxiety is a multifactorial. Clearly, there can be a genetic predisposition where we find anxiety, depression, attention deficit disorder, etc. within the family. Environmental factors have more recently been shown to play a major role. These factors can include nutrition, electronics, society expectations, bullying, sports, exercise or lack of stress reducing exercises, and school. In practice, by far the most pronounced and far-reaching stress for most children is school. Almost universally, physicians and practitioners will find the demands of school dramatically increases the stress and anxiety the child is feeling and subsequently its associated medical, occasions. The pressures appear to be greatest in the students who strive for high performance; society places a priority on high-performance over the ability to have a balanced life.

So how do we at New Hampshire’s Hospital for Children (NHHC) at the Elliot Hospital help these children? We are developing a Children’s hospital based on Integrative Medicine. Integrative medicine includes conventional medicine, nutrition, movement/exercise, supplements, herbs, mind-body therapies, whole systems such as traditional Chinese medicine and Ayurvedic medicine, energy techniques, manual manipulation medicine and spirituality. We currently have one pediatric specialist trained in integrative care and three more pediatricians who will be finishing their training this year. In addition, here at NHHC, there are multiple physicians and nurse practitioners trained in mind body therapies, manual medicine and how to bring herbs and supplements into the treatment of children. For stress and anxiety, we work with dietary modifications, teach the children various mind body therapies, recommend proven botanicals and supplements and incorporate stress reducing exercises that have been shown to improve anxiety.

Ultimately, stress and anxiety are part of children’s lives. If approached correctly they can not only be managed but also turned into gifts that shape the way children look at life. We are here to help guide them down that path.

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