

STRESS AND ANXIETY: A BURNING TOPIC FOR RESEARCH IN *KAUMARBHRITYA*

¹Dr. Rakesh Sharma, Dr. Bakhtyar Asharafi^{2*} and ³Dr. Bhima Devi

¹BAMS, MD, PhD. (Kaumarbhritya), H.O.D. and Reader, Dept. of Kaumarbhritya, Rajeev Gandhi Govt. P.G. Ayurvedic Medical College Paprola, Dist. Kangra, Himachal Pradesh, India. Pin.176115.

²BAMS, MD (Kaumarbhritya), Ayurveda Medical Officer, Ayushwing Dist. Hospital Indore, Dist. Indore Madhya Pradesh.

³BAMS, MD (Kaumarbhritya), Research Officer. Govt. of India New Delhi.

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*Corresponding Author

Dr. Bakhtyar Asharafi

BAMS, MD

(Kaumarbhritya), Ayurveda
Medical Officer, Ayushwing
Dist. Hospital Indore, Dist.
Indore Madhya Pradesh.

ABSTRACT

Everyone feels sad, excited or angry, but when kids feel too good or too mad they may be dealing with stress and anxiety due to burden of study, relation with friends, comparison with colleagues and many more. In future era this is going to be major child health problem as they are associated with considerable burden of disease, suicides and poor quality of life. Also children don't exhibit symptoms of stress as in adults and the disease remains one of the most under diagnosed mental health problem. Although modern therapeutics have modalities for management of this but approximately 30%–40% of patients have a partial response to the available interventions. Therefore there is wide scope of research to find out a safest remedy or non-pharmacological

approach. *Ayurveda* provides multimodality approach in the form of *yoga*, *panchkarma* procedures, *medhya rasayanas* and behavioral therapy through natural techniques that enhances mental ability.

KEYWORDS: Stress, Anxiety, *Ayurveda*, *Panchkarma*, *Yoga*, *Medhya rasayanas*.

1. INTRODUCTION

According to *Ayurveda* a healthy body cannot be attained without a healthy mind. There is interrelationship of body, mind and soul and these are considered as the three pillars of life.^[1]

As providers and caretakers, we tend to view the world of children as happy and carefree.

After all, kids don't have jobs to keep or bills to pay, so what could they possibly have to worry about? Plenty! Some of these challenges include academic struggles, bad grades, feeling isolated, bullying, and divorce. Also stress and anxiety are the most common cause of premature mortality, acceleration of aging, and reduced life expectancy.^[2] Being an alarming problem in children the disease needs effective and safe treatment. Modern therapeutics though have a spectrum of drugs for the management of such disorders, they are also having serious side effects and habit forming nature. The purpose of this paper is to have a look at the increasing level of stress and anxiety found in children and what can be done in *Ayurveda* to help these children.

2. STRESS AND ANXIETY

Stress is a part of human being and begins even before birth. It plays an important part in the development from learning to eat to trying to memorize. In order to learn and grow, a degree of stress is important! A small degree of stress during tests is important as it produces extra energy in the brain to concentrate and do well. But too much stress can have a profound impact on children.^[3] Even a constant low level of stress can take a toll and can change children's mood and behavior and cause hyperactivity, depression, anxiety, etc. Big stressors for children are parents fighting, moving, taking a test, fighting with a friend or sibling, difficulty at school and appearance.^[4] Smaller stressors are homework, too many chores, acne, being sick and being tardy to school.

Anxiety is the uneasiness, worry, or tension we experience when we expect a real or perceived threat to our welfare. 10-20% of school age children experience this.^[5a]

2.1 Typical anxieties are^[5b]

- Infants: stranger anxiety 7-9 months
- Early Childhood: separation anxiety, ghosts, monsters
- Elementary: school performance, burglars, hurricanes, and illness
- Middle childhood: academic difficulties, social issues, natural dangers, death
- Adolescence: moral issues, relationships, future etc.

Anxiety is considered to be harmful when it affects child's ability to learn, making friends, or having fun. When it begins to have impact on child's functioning. Child's thinking becomes unrealistic, catastrophic, and pessimistic.^[6] There is appearance of physical symptoms like stomachaches, nausea, vomiting. Severe anxiety like this can harm children's mental and

emotional wellbeing, affecting their self-esteem and confidence.^[7] They may become withdrawn and go to great lengths to avoid things or situations that make them feel anxious. Anxiety disorders also often co-occur with other disorders such as depression, eating disorders, and attention-deficit/hyperactivity disorder (ADHD) etc.^[8]

2.2 Sources of Stress

Stress is a function of the demands placed on us and our ability to meet them. These demands often come from outside sources, such as family, jobs, friends, or school. But it also can come from within, often related to what we think we should be doing versus what we're actually able to do. So stress can affect anyone who feels overwhelmed even kids. In preschoolers, separation from parents can cause anxiety. As kids get older, academic and social pressures (especially from trying to fit in) create stress. Many kids are too busy to have time to play creatively or relax after school. Kids who complain about all their activities or who refuse to go to them might be overscheduled. Talk with your kids about how they feel about extracurricular activities. If they complain, discuss the pros and cons of stopping one activity. If stopping isn't an option, explore ways to help manage your child's time and responsibilities to lessen the anxiety. Kids' stress may be intensified by more than just what's happening in their own lives. Kids who see disturbing images on TV or hear talk of natural disasters, war, and terrorism may worry about their own safety and that of the people they love.

2.3 When is anxiety a problem for children?

When it starts to get in the way of their day-to-day life it becomes a problem for children. "We all get anxious at times, but some children seem to live a life of anxiety, where it's not short-term and it's not just an occasional thing," says Paul Stallard, Professor of Child and Family Mental Health at the University of Bath.

"If you go into any school at exam time all the kids will be anxious but some may be so anxious that they don't get into school that morning," says Professor Stallard. "Some will sit in an exam and their mind freezes and they can't get anything down on paper. This is when anxiety starts to interfere with what children need to do or would like to do in everyday life." Severe anxiety like this can harm children's mental and emotional wellbeing, affecting their self-esteem and confidence. They may become withdrawn and go to great lengths to avoid things or situations that make them feel anxious.

3. What can be done?

An initial necessary step in understanding the development of childhood depression and anxiety is to expand assessment of these conditions in the clinical and research setting through multi-method, multi-session and multi-informant techniques.

A combination of *Ayurvedic* treatment and modern Cognitive therapy with parents based approaches can be used to deal with stress and anxiety in a holistic empowering way.

✓ ***Ayurvedic approach*** - In *Ayurveda* physical and psychological diseases are two separate specialized subjects. However no line of demarcation has been drawn between them and a flexible psychosomatic approach has been worked out. The psyche and the soma have been considered as a single unit.^[9] The physiological and psychological phenomena occurring in the living body are by the virtue of this unit of psyche and the soma.^[10] Various stressors lead to disturbances in *Manasika bhavas* by vitiating *manasika doshas*, *sharirika doshas* and *agni*. Hence for the proper management more comprehensive treatment modalities including both pharmacological and non-pharmacological strategies are required. There are three main strategies for any disease in *Ayurveda*.^[11]

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|--------------------------------------|-------------------------|
| 1. <i>Yuktivypashraya chikitsa</i> - | Pharmacological |
| 2. <i>Dev-vyapashrya chikitsa</i> | } Non - Pharmacological |
| 3. <i>Satvavajaya chikitsa</i> | |

1. *Yuktivypashraya chikitsa* (Pharmacological Management): In *Ayurvedic* texts various drugs are described for promotion of mental health and management of various psychological and psychosomatic problems. Collectively these drugs are called as '*Medhya dravyas*'. These drugs are used to restore *Medha* in patients where it is found deranged and also to promote the functions of *Medha* where it is diminished to a subnormal level. *Mandukaparni*, *Yashtimadhu*, *Guduchi* and *Shankhapushpi* are the four *medhya* drugs mentioned in *charak samhita*.^[12] These drugs shows antioxidant, anxiolytic, neurodegenerative, anti-amnesic, antidepressants, nootropic, adaptogenic and cognitive properties. Hence can be beneficial in anxiety disorders in children by deciding proper dose and mode of administration.

Panchakarma therapy

Shirodhara - An experimental study conducted by Kazuo Uebaba et al. demonstrating the probable mode of action of *Shirodhara* showed that the subjects' feelings during *Shirodhara*

had deep restfulness with less anxiety—as if the subject were between the sleep and awoken states. *Shirodhara* induces bradycardia and the relative suppression of LF/HF power spectrum density, which indicated lowered sympathetic tone. Expired gas analysis showed a decreased tidal volume and CO₂ excretion. The EEG showed the slowing of the wave, an increase in α and θ activity, and an increase in right-left coherence. These metabolic, ECG, and EEG findings support the reported experiences of relaxed and low metabolic states during *Shirodhara*. Physiological changes during *Shirodhara* were similar to those of meditation, including α -wave dominance in the frontal area and a decrease in heart rate and CO₂ excretion. These findings indicated a change in the function of the frontal lobe, limbic system, brain stem, and autonomic nervous system. The neurophysiological mechanism of the effects of *Shirodhara* on the psychophysiological changes may be related to the tactile stimulation of the skin or hair follicles innervated by the first branch of the trigeminal nerves (ophthalmic nerve). The impulses would be transmitted to the thalamus through the principal nucleus and forward to the cerebral cortex (somatosensory field) or limbic system.^[13]

2. Devavypashraya chikitsa: It comprises of *Mantra, Ausadhi, Mani, Mangala, Bali, Upahara, Homa, Niyama, Prayascitta, Upavasa, Svastyayana, Pranipata, Gamana* etc.^[14] It has empirical powers to eradicate diseases. All the items enumerated under this therapy are effective in the eradication of disease only due to the divine influence.

3. Sattvajaya chikitsa: The treatment which is use for the management of Psychiatric disorders is known as *Sattvavajaya*. Having control over the *Manas* (Psyche) such as to control it or withdraw it from coming into contact with harmful or unwholesome objects is the main object of this modality.^[15] The five aspect of *Sattvavajaya* treatment includes *Jnanam* (spiritual knowledge), *Vijnanam* (Knowledge of the scriptures related to truth), *Dhairya* (increasing the patience of the person by counseling or meditative procedures), *Smriti* (memorizing the past incidences) and *Samadhi* (meditation).^[16] Whole of the modern psychiatry can be included into these five types. Good conduct, following ethics of good moral, having spiritual knowledge, believing in Supreme Being, developing forgiving attitude and selfless devotion are important dimensions of *Sattvavajaya Chikitsa*.

Yoga: It is a mind-body practice that includes postures, breathing techniques, relaxation techniques, mindfulness, and meditation.^[17] It counteracts psychological and physical stressors, enhances self-regulation, and assists stress management.^[18] It also yields positive effects such as reduce test anxiety, increase academic performance, concentration, coping

ability with stress, reduce aggression, improve ability to handle pressure from academia, lower levels of rumination, less intrusive thoughts, increase emotional regulation among children.^[19] As children typically cannot remain still for long sessions of therapy, alternative ways of connecting with children are essential. Instead of the quiet and calming yoga as many adults enjoy, *yoga* for kids can be noisy and funny. In case of children meditation cannot be practiced as their brain is not fully matured. In them *trataka* karma can be done to enhance the concentration. Before doing yoga simple stretching exercises should be done. Like: Closing and opening up of hands, circular movement of wrist, elbow, shoulder joint, neck, ankle joint, knee joint, waist and hip joint. After light stretching exercise *asana* should be done. Some of examples that can be performed in children are; standing *asanas* - *dhruvasana*, *padahasthasana*, *vrikshasana*, *trikonasana*, sitting *asana* - *ardhacandrasana*, *pashuvishramasana*, *padamasana* & *vajrasana* and lying *asanas* - *balasana*, *makarasana*, *shavasana*, *shashakasana*. After *asana* comes the *pranayama*. *Pranayama* means controlling the breathing air.

✓ Cognitive-behavioral therapy

CBT is a type of talk therapy that teaches skills and techniques to recognize and challenge problematic thoughts, which are borrowed and modified, from the adult literature. Child will learn to identify and replace negative thinking patterns and behaviors with positive ones. He will also learn to separate realistic from unrealistic thoughts and will receive “homework” to practice what is learned in therapy.^[20]

✓ Parenting-based approaches

Parents are often very preoccupied with seeing their children succeed and intolerant of anything other than excellence.^[21] It's just not fair for parents to demand higher standard for their kids than they themselves face. Instead we should remind ourselves that sustained excellence is not natural^[22], and they should.

- Spend time with the children.
- Give the kids a stable home environment.
- Negotiate home rules-including consequences for rule breaking and stick to these rules.
- Monitor their eating habits.
- Don't just talk to your kids. Communicate with them. When children misbehave, try to understand their behaviour instead of merely punishing it.
- Acknowledge and accept his or her needs.

- Know that school is a long-term process. One immediate success or failure is not going to determine a child's life. Growth will happen. What we can do is show constant love and support and presence. Part of this support is setting up a daily routine. Routines are good. They help alleviate stress.

- Stay calm when the child becomes anxious about a situation or event.
- Recognize and praise his small accomplishments.
- Don't punish mistakes or lack of progress.
- Be flexible, but try to maintain a normal routine.

4. SUMMERY AND CONCLUSION

Children today are faced with everyday stressful events such as overexposure to the media (war, extreme weather, terrorism, illness and death), family related issues (divorce, single parent families, addictions, illness and death), and school (the ever rising expectations, over scheduling, bullying, and peer pressure). Society has given our children adult sized problems to deal with, without giving them adult sized coping skills.

Often time's children take what they are presented with and internalize these problems, or deal with them in a harmful or hurtful way. We as a society need to begin to take a proactive approach to help elementary children to deal with the everyday problems they are being faced with. Since it is nearly impossible to remove most of the stressful events from the Children's lives, we need to work together to teach them positive coping skills. Teachers and counsellors as well as parents can implement simple things into everyday activities, things such as relaxation techniques, increased physical activity, healthy eating, daily journaling, and free time for kids to just be kids.

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