



## Stress Syndrome: Its Causes, Prevention & Management Stratagem

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### ABSTRACT

*Stress is an organism's response to a stressor such as an environmental condition or a stimulus. Stress is a body's way to react to a challenge. According to the stressful event, the body's way to respond to stress is by sympathetic nervous system activation which results in the fight-or-flight response. Stress typically describes a negative condition or a positive condition that can have an impact on an organism's mental and physical well-being. This manuscript delineates about the causes of stress syndrome, its prevention and management stratagem.*

*Keywords: Self-confidence; Environmental engineering; Bio-feedback; Relaxation exercises; Tai chi; Yoga; Massage techniques; Positive reframing; Depression; Frustration; Anxiety*

Received 10/11/2013 Accepted 29/12/2013

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### INTRODUCTION

Competition in any sphere of life often manifests anxiety, strain, fear, frustration and stress. Contemporary and competitive environment seemed to be one where the individual or the group wanted to outsmart the opponents in order to establish supremacy in competing endeavor. Stress tends to rob physical energy, enjoyment and success than any other factor. It can destroy self-confidence by leading individuals to believe they are incompetent and can deny individuals to demonstrate skills they have mastered through countless hours of practice. Stress causes inter-personal conflict, induces physical injury and drives towards early retirement thus:

- Psychological Stress robbed off Physical Energy, victory and enjoyment than any other factor.
- Can destroy Self-Confidence, deny the use of skills and destroy peak-performance flow.
- Causes inter-personal conflicts, induces injury and drives towards early retirement.
- Stress is an insidious disease and when sustained manifests in the form of Burn-out.
- Stress is defined as occurring when there is substantial imbalance between "What you perceive is being demanded of you by the Environment and what you perceive your capabilities are, especially when you perceive out-come to be important.

Stress is a kind of non-specific response superimposed upon various specific manifestations of an insulting agent impinging upon the organism and considered it as a state in which the natural homeostasis of the body is disturbed. Stress occurs when there is a substantial imbalance between the perceived demands and the perceived capabilities of the individual in the circumstance when the outcome is also considered important. It is not the environment per se but an individual's perception of the environment that cause stress. Physiologically, the left hemisphere of our brain works as Analyzer where worry takes place and the right hemisphere is the Integrator where components of a skill are integrated into complex whole. The analyzer and integrator usually work together smoothly when individuals are in flow. But when they are stressed, the analyzer tends to dominate, hurting one's performance.

### THE TWO SIDED BRAIN ACTIVITY

Left hemisphere

Right hemisphere

(works as Analyzer)

Analysis

Sequential Planning

Rational thinking

Verbal Self Instructions

(works as integrator)

Execution

Creativity

Orientation in Space

Emotion; Imagery

## ELEMENTS OF STRESS

Stress contains three elements: Individual's-

(a) Environment,

(b) Perceptions, and

(c) Responses to these in the form of Arousal which activates the mind and body.

Usually people wrongly blame Environment to causing Stress, it is a wrong notion, In fact-it is the perception of an individual about the events (environment)

### Yerks & Dodson Law

Pre-start Fever

Pre-start states : Performance

Readiness

Pre-start Apathy

Stress is the result of – person's negative thoughts and changes in arousal in response to the environment.

## SYMPTOMS OF STRESS

### Physiological

### Psychological

### Behavioral

#### Increased-

- |                       |                     |                    |
|-----------------------|---------------------|--------------------|
| • Heart rate          | worry               | rapid talking      |
| • Blood pressure      | inability in        | nail biting        |
| • Sweating            | decision making     | foot tapping       |
| • Brain wave activity | confusion           | increased blinking |
| • Respiration         | decreased attention | muscle twitching   |
| • Muscle tension      | losing control      | broken voice       |
| • Blood sugar         |                     | trembling          |
| • Cotton mouth        |                     |                    |
| • Urination           |                     |                    |

## STRESS MANAGEMENT TECHNIQUES

A host of techniques have been evolved to minimize the contraindications of stress which can be compartmentalized as environmental engineering, somatic stress management techniques and cognitive stress management.

### I. Environmental Engineering Techniques:

- Reduce Uncertainty
  - ☐ Reduce Importance

### II. Somatic Stress Management Techniques:

(a) Imagery Relaxation (Imagining a place where you always feel very relaxed)

- ☐ Change the Environment in the persons mind
- ☐ Select a quite & comfortable setting
- ☐ Individual should be alert & not excited
- ☐ Create the right attitude about learning the skill
- ☐ Have comfortable positions- Lying down on the floor

b) Self-directed relaxation (Progressive Relaxation)

- ☐ Tensing-Relaxing

### III. Cognitive Techniques

- ☐ Autogenic Training
- ☐ Thought Stopping
- ☐ Rational thinking
- ☐ Smart Talk (hierarchy of negative thoughts)

### IV. Bio-Feedback

- Visual feedback
- Auditory feedback
- Self appraisal

- Monitoring
  - ☑ Always be positive,
  - ☑ Set realistic and attainable goals,
  - ☑ Believe in your abilities,
  - ☑ Try hard to the best of your capabilities,
  - ☑ Always hope for a favorable outcome.

## RELAXATION EXERCISES

The body's natural relaxation response is a powerful antidote to stress. Relaxation techniques such as deep breathing, visualization, progressive muscle relaxation, meditation, and yoga can help you activate this relaxation response. When practiced regularly, these activities lead to a reduction in everyday stress levels and a boost in feelings of joy and serenity. What's more, they also serve a protective quality by teaching how to stay calm and collected in the face of life's curveballs.

☑ We can't avoid all stress, but can counteract its negative effects by learning how to evoke the *relaxation response*, a state of deep rest that is the polar opposite of the stress response.

☑ The stress response floods our body with chemicals that prepare us for "fight or flight." But while the stress response is helpful in true emergency situations where we must be alert, it wears our body down when constantly activated.

☑ The relaxation response brings our system back into balance: deepening our breathing, reducing stress hormones, slowing down heart rate and blood pressure, and relaxing the muscles.

☑ In addition to its calming physical effects, research shows that the relaxation response also increases energy and focus, combats illness, relieves aches and pains, improves problem-solving abilities, and boosts motivation and productivity. Best of all – with a little practice – anyone can reap these benefits.

☑ A variety of relaxation techniques help achieve the relaxation response. Those whose stress-busting benefits have been widely studied include deep breathing, progressive muscle relaxation, meditation, visualization, yoga, and tai chi.

Learning the basics of these relaxation techniques isn't difficult. But it takes practice to truly harness their stress-relieving power with daily practice. Most stress experts recommend setting aside at least 10 to 20 minutes a day for relaxation practice. To get even more stress relief, must aim for 30 minutes to an hour.

## GETTING THE MOST OUT OF YOUR RELAXATION PRACTICE

### Set aside time in your daily schedule

The best way to start and maintain a relaxation practice is by incorporating it into your daily routine. Schedule a set time either once or twice a day for your practice. You may find that it's easier to stick with your practice if you do it first thing in the morning, before other tasks and responsibilities get in the way. Don't practice when you're sleepy. These techniques can relax you so much that they can make you very sleepy, especially if it's close to bedtime. You will get the most out of these techniques if you practice when you're fully awake and alert.

### Doing alone or in social stimulation

If you crave solitude, solo relaxation techniques such as meditation or progressive muscle relaxation will quiet your mind and recharge your batteries. If craving for social interaction, a class setting will give you the stimulation and support you're looking for. Practicing with others may also help stay motivated.

## DEEP BREATHING FOR STRESS RELIEF

With its focus on full, cleansing breaths, deep breathing is a simple, yet powerful, relaxation technique. It's easy to learn, can be practiced almost anywhere, and provides a quick way to get your stress levels in check. Deep breathing is the cornerstone of many other relaxation practices, too, and can be combined with other relaxing elements such as music. All you really need is a few minutes and a place to stretch out.

## METHODS TO PRACTICE

The key to deep breathing is to breathe deeply from the abdomen, getting as much fresh air as possible in your lungs. When you take deep breaths from the abdomen, rather than shallow breaths from your upper chest, you inhale more oxygen. The more oxygen you get, the less tense, short of breath, and anxious you feel. So the next time you feel stressed, take a minute to slow down and breathe deeply:

- ☑ Sit comfortably with your back straight. Put one hand on your chest and the other on your stomach.
- ☑ Breathe in through your nose. The hand on your stomach should rise. The hand on your chest should move very little.
- ☑ Exhale through your mouth, pushing out as much air as you can while contracting your abdominal muscles. The hand on your stomach should move in as you exhale, but your other hand should move very little.

☒ Continue to breathe in through your nose and out through your mouth. Try to inhale enough so that your lower abdomen rises and falls. Count slowly as you exhale.

☒ If you have hard time breathing from your abdomen while sitting up, try lying on the floor. Put a small book on your stomach, and try to breathe so that the book rises as you inhale and falls as you exhale.

### **PROGRESSIVE MUSCLE RELAXATION FOR STRESS RELIEF**

Progressive muscle relaxation is another effective and widely used strategy for stress relief. It involves a two-step process in which you systematically tense and relax different muscle groups in the body.

#### **PROGRESSIVE MUSCLE RELAXATION SEQUENCE**

- ☒ Right foot
- ☒ Left foot
- ☒ Right calf
- ☒ Left calf
- ☒ Right thigh
- ☒ Left thigh
- ☒ Hips and buttocks
- ☒ Stomach
- ☒ Chest
- ☒ Back
- ☒ Right arm and hand
- ☒ Left arm and hand
- ☒ Neck and shoulders
- ☒ Face

Most progressive muscle relaxation practitioners start at the feet and work their way up to the face. Here are few steps to follow

- ☒ Loosen your clothing, take off your shoes, and get comfortable.
- ☒ Take a few minutes to relax, breathing in and out in slow, deep breaths.
- ☒ When you're relaxed and ready to start, shift your attention to your right foot. Take a moment to focus on the way it feels.
- ☒ Slowly tense the muscles in your right foot, squeezing as tightly as you can. Hold for a count of 10.
- ☒ Relax your right foot. Focus on the tension flowing away and the way your foot feels as it becomes limp and loose.
- ☒ Stay in this relaxed state for a moment, breathing deeply and slowly.
- ☒ When you're ready, shift your attention to your left foot. Follow the same sequence of muscle tension and release.
- ☒ Move slowly up through your body — legs, abdomen, back, neck, face — contracting and relaxing the muscle groups as you go.

### **MINDFULNESS MEDITATION FOR STRESS RELIEF**

Meditation that cultivates mindfulness is particularly effective at reducing stress, anxiety, depression, and other negative emotions. Mindfulness is the quality of being fully engaged in the present moment, without analyzing or otherwise “over-thinking” the past experience. Instead of worrying about the future or dwelling on the past, mindfulness meditation switches the focus to what's happening right now. For stress relief, try the following mindfulness meditation techniques:

#### ☒ **Body scan:**

Body scanning cultivates mindfulness by focusing your attention on various parts of your body. Like progressive muscle relaxation, you start with your feet and work your way up. However, instead of tensing and relaxing your muscles, you simply focus on the way each part of your body feels without labeling the sensations as either “good” or “bad”.

#### ☒ **Walking meditation:**

You don't have to be seated or still to meditate. In walking meditation, mindfulness involves being focused on the physicality of each step — the sensation of your feet touching the ground, the rhythm of your breath while moving, and feeling the wind against your face.

#### ☒ **Mindful eating :**

If you reach for food when you're under stress or gulp your meals down in a rush, try eating mindfully. Sit down at the table and focus your full attention on the meal (no TV, newspapers, or eating on the run). Eat slowly, taking the time to fully enjoy and concentrate on each bite.

#### **Starting a meditation practice**

All you need to start meditating are:

☒ **A quiet environment.** Choose a secluded place in your home, office, garden, place of worship, or in the great outdoors where you can relax without distractions or interruptions.

☒ **A comfortable position.** Get comfortable, but avoid lying down as this may lead to you falling asleep. Sit up with your spine straight, either in a chair or on the floor. You can also try a cross-legged or lotus position.

☒ **A point of focus:** Pick a meaningful word or phrase and repeat it throughout your session. You may also choose to focus on an object in your surroundings to enhance your concentration, or alternately, you can close your eyes.

☒ **An observant, non critical attitude:** Don't worry about distracting thoughts that go through your mind or about how well you're doing. If thoughts intrude during your relaxation session, don't fight them. Instead, gently turn your attention back to your point of focus.

☒ You can do this visualization exercise on your own, with a therapist's help, or using an audio recording.

☒ Close your eyes and let your worries drift away. Imagine your restful place. Picture it as vividly as you can—everything you can see, hear, smell, and feel. Guided imagery works best if you incorporate as many sensory details as possible. For example, if you are thinking about a dock on a quiet lake:

☒ **See** the sun setting over the water

☒ **Hear** the birds singing

☒ **Smell** the pine trees

☒ **Feel** the cool water on your bare feet

☒ **Taste** the fresh, clean air

#### **YOGA FOR STRESS RELIEF**

Yoga is an excellent stress relief technique. It involves a series of both moving and stationary poses, combined with deep breathing. The physical and mental benefits of yoga provide a natural counterbalance to stress, and strengthen the relaxation response in your daily life.

#### **What type of yoga is best for stress?**

Although almost all yoga sessions end in a relaxation pose, however, those sessions wherein emphasis is laid on slow and steady movement combined with gentle stretching are best for stress relief. Power yoga, with its intense poses and focus on fitness, is not the best choice for stress relief. If you're unsure whether a specific yoga class is appropriate for stress relief, consult the yoga teacher or expert who could guide you best for the stress relieving postures. Since, injuries can happen when yoga is practiced, incorrectly, it's best to learn by attending group classes or hiring a private teacher. Once you've learned the basics, you can practice alone or with others, tailoring your practice as you deem fit.

#### **TIPS FOR STARTING YOGA PRACTICE**

☒ **Consider your fitness level and any medical issues before joining a yoga class.**

There are many yoga classes for different needs, such as prenatal yoga, yoga for seniors, and adaptive yoga (modified yoga for disabilities). "Hot" or Bikram yoga, which is practiced in a heated environment, might be too much if you are just starting out.

☒ **Look for a low-pressure environment where you can learn at your own pace.**

Don't extend yourself beyond what feels comfortable, and always back-off of a pose at the first sign of pain. A good teacher can show you alternate poses for ones that are too challenging for your health or fitness level.

If you've ever seen a group of people in the park slowly moving in synch, you've probably witnessed tai chi. Tai chi is a self-paced, non-competitive series of slow, flowing body movements. These movements emphasize concentration, relaxation, and the conscious circulation of vital energy throughout the body. Though tai chi has its roots in martial arts, today it is primarily practiced as a way of calming the mind, conditioning the body, and reducing stress. As in meditation, tai chi practitioners focus on their breathing and keeping their attention in the present moment. Tai chi is a safe, low-impact option for people of all ages and levels of fitness, including older adults and those recovering from injuries. Once you've learned the moves, you can practice it anywhere, at any time, by yourself, or with others. To reap the greatest stress reduction and other health benefits from tai chi, consider practicing it regularly. While you may get some benefit from a 12-week tai chi class, you may enjoy longer and bigger benefits if you continue tai chi for the long term and become more skilled. You may find it helpful to practice tai chi in the same place and at the same time every day to develop a routine. But if your schedule is erratic, do tai chi whenever you have a few minutes. You can even draw on the soothing mind-body concepts of tai chi without

performing the actual movements if you get stuck in stressful situations — a traffic jam or a contentious work meeting, for instance.

### **Making tai chi work for you**

- ☑ As with yoga, tai chi is best learned in a class or from a private instructor.
- ☑ Although tai chi is normally very safe and gentle, be sure to discuss any health or mobility concerns with your instructor.
- ☑ Tai chi classes are often offered in community centers, senior centers, or local community colleges in the north-east region.

### **MASSAGE TECHNIQUE FOR RELAXATION**

#### **SCALP SOOTHER**

Place your thumbs behind your ears while spreading your fingers on top of your head. Move your scalp back and forth slightly by making circles with your fingertips for 15-20 seconds.

#### **EYES TECHNIQUES**

Close your eyes and place your ring fingers directly under your eyebrows, near the bridge of your nose. Slowly increase the pressure for 5-10 seconds, then gently release. Repeat 2-3 times.

#### **Eyes Massage**

Here are some simple self-massage techniques that you can enjoy whenever you have time.

- Close your eyes, relax your face, ease your mind. Slow and deep breathing (so smooth and ease that you cannot hear yourself)
- Rubbing around your eyes (be gentle with the eye bag area)
- Circulate eye balls movements, up & down, right & left, then look far

Warming up your hands by rubbing and then cover your eyes to repeat the breathing exercise for 8 times (if you feel pressure on your eyes, then you can first gentle circulate massage with warmed hands, and then do the breathing exercise) Open your eyes slowly with the inhale breathing.

Below are some eye relaxing techniques that you can practice easily at your desk.

- (i) Place your elbows on your desk and rest your hands over eyes.
  - (ii) Let your weight fall forward and rest your head in hands.
  - (iii) Close your eyes and inhale deeply through your nose; hold it for three seconds, then exhale.
- Continue this deep breathing for 15 to 30 seconds. Repeat this exercise several times a day.

#### **Change Focus**

- (i) Hold up a finger/pen a few centimeters in front of you.
- (ii) Focus on the finger/pen as you slowly move it away, and then focus on something further away
- (iii) Next, shift focus back to the finger/pen, and slowly bring the finger/pen back towards you.
- (iv) Now, shift your focus to something farther than the previous object and hold your eyes there for 2 seconds.
- (v) Alternate your focus between the near and far objects, looking at each for at least 2 seconds at a time. Repeat this exercise several times a day.

#### **Eye Rolls**

Close eyes and imagine a clock face. Start by moving eyes slowly from the centre to the 12 o'clock position and hold for 2 seconds, Then slowly roll eyes clockwise, until the cycle is completed. Repeat the exercise anti-clockwise. Next, slowly and gently move eyes to the 12 o'clock position and hold for 2 seconds.

☑ Shift the eye position to 6 o'clock position and hold for 2 seconds, and follow by 9 o'clock and 3 o'clock positions, holding each end positions for 2 seconds. Remember to stretch as far out as possible all the time and do it slowly.

☑ Repeat the entire exercise at least 3 times. move eyes to the left, then slowly to the right

#### **Position:**

The patient sits, with the head leaning backward, the operator standing at his side.

(I) The index finger is placed on his eyebrow, the middle finger grasping the eyelid, which is pressed, with either a radial or circular motion, against the eye. Be very careful not to use too much strength, and perform the movement as quickly as possible. By placing the index on the eyebrow we take the weight of the heavy hand off the tender organ. The lid really performs the massage by pressure generated through the finger.

(II) Vibrations with the fingers. While it is understood that the operator's hands should at all times be scrupulously clean, it becomes necessary to always use a mild antiseptic before treating the eyes.

#### **SINUS PRESSURE RELIEF**

Place your fingertips at the bridge of your nose. Slowly slide your fingers down your nose and across the top of your cheekbones to the outside of your eyes.

Reach one arm across the front of your body to your opposite shoulder. Using a circular motion, press firmly on the muscle above your shoulder blade. Repeat on the other side.

### **SHOULDER TENSION RELIEF**

The most common type of massage is Swedish massage, a soothing technique specifically designed to relax and energize. Another common type of massage is Shiatsu, also known as acupressure. In Shiatsu massage, therapists use their fingers to manipulate the body's pressure points. Although self-massage is good for stress relief, getting a massage from a professional massage therapist can be tremendously relaxing and more thorough than what you can do yourself. When booking a massage, try types like Swedish or Shiatsu, which promote overall relaxation. Deep tissue and sports massages are more aggressive. They often target specific areas and may leave you sore for a couple of days, making them less effective for relaxation and stress relief.

### **EAR RELEASE EXERCISE (FOR HEADACHES AND EAR TENSION)**

Using a wide squat or sitting comfortably, perform the following

\* Canal: Open and shut lower jaw while your pinky finger is in the ear canal lifting and opening canal. Open and close jaw while humming to assist in releasing tension in joints.

\* Ear Lobe: Place thumb in ear canal. Grasp earlobe with air finger and gently pull, stretch and rotate earlobe. Use humming to create a greater release.

### **ATTAINING RELAXATION INSTANTLY**

Breathing deeply; Dropping shoulders; Getting organized; Auto suggestion; Relaxation (Mental); Rational analysis; Gaining confidence; Avoiding frustration; Compatible understanding; Positive re-enforcement

### **SOME HANDY COMMON COPING STRATEGIES FOR DISTRESS**

#### **(I) Active Coping**

- ☑ Sharing with spouse or friends
- ☑ Using relaxation techniques
- ☑ Listening music
- ☑ Exercising

#### **(II) Diversive Coping**

- ☑ Smoking
- ☑ Taking drugs
- ☑ Taking interest in sex

#### **(III) Positive Reframing**

- ☑ Attending Parties / Functions
- ☑ Involving in hobbies
- ☑ Performing religious rituals
- ☑ Prefer to watch movies

#### **(IV) Maladaptive Coping**

- ☑ Yelling
- ☑ Withdrawing
- ☑ Fighting
- ☑ Sleeping
- ☑ Feeling Guilty

#### **Citation of This Article**

Kusum Chauhan, Raaz K Maheshwari, Jayant Malhotra, Vikram Bhardawaj, Laly Joseph, Rajnee. Stress Syndrome: Its Causes, Prevention & Management Stratagem. *Int. J. Educat. Res. Technol.* Vol 5 [1] March 2014. 119-125