

Management of Stress Through Yoga For Health and Wellness

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Abstract

Stress is necessary for the life. We need stress for creativity, learning, and our very survival. Stress is only harmful when it becomes overwhelming and interrupts the healthy state of equilibrium that our nervous system needs to remain in balance. Unfortunately, overwhelming stress has become an increasingly common characteristic of contemporary life. When we are in stress it is observed that the Cortisol hormone is produced by the body and it causes the arteries to narrow. In emergency situations stress can save our life and an emotional and physical way in which we respond pressure. It also helps us to meet challenges. But beyond a certain point, stress stops being well known fact that one's lifestyle can affect one's mortality rate. According to the study, conducted by Carolyn Aldwin of Oregon State University, individuals who tend to live a more stressful life have a 50% higher chance of dying. The cause of Stress is exhaustive work schedule or a rocky relationship. Sometimes positive events such as getting married, buying a house, going to College, or receiving a promotion may be the cause of Stress. Also Stress may be self generated. Simply by the mental symptoms of tension, anxiety, irritability, inability to concentrate, feeling excessively tired and trouble of sleeping and by physical symptoms like dry mouth, a pounding heart, difficult breathing, stomach upset, headache, frequent urination, sweating palms, muscle ache, tight muscles that may cause pain and trembling it is understood that a person is in stress. Many studies say that stress can take a dangerous toll on the health of people with heart problems. Research says that people who had high levels of both stress and depression were 48 percent more likely to die or have a heart attack compared with the group that had low levels of stress and depression the researchers said. Another study indicates that stress management programs may reduce the risk of heart problems, including heart attack, by up to 75 percent in people with heart disease. It also proved that people who get stressed are also likely to have silent coronary artery disease. According to the American Psychological Association, chronic stress is linked to the six leading causes of death: heart disease, cancer, lung ailments, accidents, cirrhosis of the liver and suicide. And more than 75 percent of all physician office visits are for stress-related ailments and complaints. Chronic stress can affect the brain, suppress the thyroid, cause blood sugar imbalances, decrease bone density and muscle tissue, raise blood pressure, reduce the immunity and ability to heal, and increase fat deposits around the abdomen that are associated with heart attacks, strokes and elevated "bad" cholesterol. In a longitudinal study at Columbia University Medical Center in New York City it is found nearly 50,000 people with coronary heart disease who were 45 years old, after a six-year follow-up, there were 1,337 deaths or heart attacks among the people in the study. In another study it is seen one in three of all deaths in Britain are caused by cardiovascular disease, accounting for more than 200,000 deaths per year associated with stress. The commonly stress managed Yogasanas are savasana, salvasana, padmasana, swastikasan, bhujangasana, surya namaskar etc. and Pranayams are bhramri pranayam, nadi sodhan pranayam, suryavedan pranayam, sputa sagar pranayam etc. Experts say 30 minutes of regular practicing of meditation expand the depth of mind, makes it calm, keep away the stress and helps to be healthy, fit and wellbeing.

Introduction:

Stress has been one of the leading causes of severe illness in the present day situation. It is a psycho-somatic distress and very common catchword in the society. It is a fact of nature in which forces from the inside or outside world affect the individual. In everyday life we are accompanied and experienced by it. Accordingly compilation of data of Global Organization for Stress 80% of workers feel stress on the job in USA in China 86% workers having the highest rise in work place stress, Alarmingly 91% of Adult Australians feel stress in at one important area of their lives. Almost 50% feel very much stressed about one part of their life, Australian employees are absent for an average of 3.2 working days each year through stress. This workplace stress costs the Australian economy approximately \$14.2 billion. An estimated 4,42,000 individuals in Britain who worked in 2007/08 believed that they were experiencing work related stress at a level that was making them ill. Approximately 13.7 million working day lost each year in the UK as result of work-related illness at a cost of 28.3 billion per year. Stress is normal physical responses to events that make us feel threaten or upset our balance in some way, this response is body's way protecting us.

Stress is the feeling of being under too much mental or emotional pressure. Pressure turns into **stress** when you feel unable to cope. People have different ways of reacting to **stress**, so a situation that feels **stressful** to one person may in fact be motivating to another. When stressors throw our nervous system out of balance, relaxation techniques can bring it back into a balanced state by producing the *relaxation response*, a state of deep calmness that is the polar opposite of the stress response. When stress overwhelms our nervous system our body is flooded with chemicals that prepare us for "fight or flight." While the stress response can be life saving in emergency situations where we need to act quickly, it

wears our body down when constantly activated by the stresses of everyday life. The relaxation response puts the brakes on this heightened state of readiness and brings our body and mind back into a state of equilibrium. According to the American Psychological Association, chronic stress is linked to the six leading causes of death: heart disease, cancer, lung ailments, accidents, cirrhosis of the liver and suicide. And more than 75 percent of all physician office visits are for stress-related ailments and complaints. Chronic stress can affect our brain, suppress our thyroid, cause blood sugar imbalances, decrease bone density and muscle tissue, raise blood pressure, reduce our immunity and ability to heal, and increase fat deposits around our abdomen that are associated with heart attacks, strokes and elevated "bad" cholesterol. Scientific evidence has surfaced that stress reduction bolsters longevity by directly impacting our DNA in a favorable way. That revelation comes from the many years of work by three American geneticists who won the 2009 Nobel Prize for Medicine and Physiology. Their research (Epel, et. al) involves the study of telomeres. Study provided evidence that long-term exposure to stress decreases telomerase, the enzyme that provides protection for the telomeres. A shortage of the enzyme results in telomere shortening, leading to accelerated aging through premature cell death. Sudden death without antecedent angina, suggesting cardiac arrhythmia, as well as deaths preceded by chest pain, suggesting coronary occlusion were observed in many studies that have led to estimates that between 20 and 40 percent of sudden cardiac deaths are precipitated by acute emotional stressors. More than half of Americans reported personal health problems (53 percent) as a source of stress, roughly the same level (52 percent) as last year but up from 2009 (47 percent). Researchers have found that people aged 65 or older were five times more likely to die within the six year

follow-up period if they had high levels of stress hormones. They were more likely to die from cardiovascular disease, such as heart attacks, heart failure and strokes, but not more likely to die from other causes such as cancer, it was found. Short-term stress is thought to be good for health but chronic long-term stress can lead to damage in the lining of the blood vessels. Stress can also raise blood pressure and cholesterol which are known to be harmful to the heart and stressed people tend to eat a poorer diet and may be more likely to smoke. Researchers at VU University Medical Center in The Netherlands, measured levels of the stress hormone, cortisol, in the urine of 861 people aged 65 or older. The measurement was taken once over a 24-hour period. However, All Yoga exercises and processes aim at purification, nervous control and co-ordination. It gives gentle exercise to the body as a whole including individual organs. Thus it helps to reduce the physical all kind of stress. From many research works it has proved that it is preventive and curative of many diseases. Yogasanas work to bring fitness through its regular practices. Yoga poses bring a strong rapport in nerves, muscles as well as in whole body. It helps secretion of hormones from different glands in balanced conditioned. It relaxes and strengthens muscles in the body and helps to maintain muscle tone. Pranayam, Sudhi Kriyas and Mudra help in control of breathing, purifications and stronger of different parts of the body. Also as integral parts of Yoga culture, Pranayam, Sudhi Kriyas and Mudra work to protect stress, to be physically fit and mentally healthy. 20-30 minute meditation sessions a day can have lasting beneficial effects on health. Another advantage of Yoga is of its simplicity of technique, almost no requirement of equipments to practice and no need of much space.

Aim and objectives of the study:

The aim and objectives of the study is to analyze how stress affects our body and

mind and how it is being managed through practicing of Yoga to remain healthy, fit and wellbeing.

Hypothesis of the study:

It is hypothesized that stress can be managed through practicing of yoga.

Observation:

Stresses make life less enjoyable and contribute to such bothersome symptoms as headaches, insomnia, and back pain. Stresses affects brain, nerves, muscle, joints, heart, stomach, pancreas, intestines, reproductive system. During stress the adrenal medulla secretes two neurotransmitters, epinephrine (also called adrenaline) and norepinephrine (noradrenalin), in the response to stress. Researchers have found that people aged 65 or older were five times more likely to die within the six year follow-up period if they had high levels of stress hormones. They were more likely to die from cardiovascular disease, such as heart attacks, heart failure and strokes, but not more likely to die from other causes such as cancer, it was found. Short-term stress is thought to be good for health but chronic long-term stress can lead to damage in the lining of the blood vessels. Stress can also raise blood pressure and cholesterol which are known to be harmful to the heart and stressed people tend to eat a poorer diet and may be more likely to smoke. Researchers at VU University Medical Center in The Netherlands, measured levels of the stress hormone, cortisol, in the urine of 861 people aged 65 or older. The measurement was taken once over a 24-hour period. In another study one in three of all deaths in Britain are caused by cardiovascular disease, accounting for more than 200,000 deaths per year. Ellen Mason, Senior Cardiac Nurse at the British Heart Foundation, said: “Stress is already associated with an increased risk of heart disease and this study throws up more evidence about the role of cortisol. Scientific evidence has

surfaced that stress reduction bolsters longevity by directly impacting our DNA in a favorable way. That revelation comes from the many years of work by three American geneticists who won the 2009 Nobel Prize for Medicine and Physiology. Their research (Epel, et. al) involves the study of telomeres.

Study provided evidence that long-term exposure to stress decreases telomerase, the enzyme that provides protection for the telomeres. A shortage of the enzyme results in telomere shortening, leading to accelerated aging through premature cell death. *British Medical Journal (BMJ)*, looked at death risk in 68,000 adults over 35 who were involved in previous studies from 1994 to 2004. Reviewing mental health surveys given to the study participants along with mortality data, the researchers and found those with mental health issues were more likely to die than their stress-free counterparts. Teen stress increase risk of suicide. The practice of yoga involves stretching of the body and forming different poses, while keeping breathing slow and controlled. The body becomes relaxed and energized at the same time. There are various styles of yoga, some moving through the poses more quickly, almost like an aerobic workout, and other styles relaxing deeply into each pose. Some have a more spiritual angle, while others are used purely as a form of exercise. Thus in this way yoga prevent stress. It has been seen that under normal conditions, our brain slowly releases cortisol hormone into our body to make our muscles work. However, when we are highly stressed our brain thinks there's an emergency and responds by flooding our body with cortisol. If there really was an emergency, we would need this much cortisol to deal with broken bones, excessive bleeding, and so on. But if we're just stressed out by life, excess cortisol can lead to ulcers, high blood pressure, bone density loss, and can throw our immune system out of whack that is why we get sick when we're stressed. It can also lead

to weight gain because the body thinks it's responding to an emergency and so holds onto as much fat as it can. Regular practitioner yoga can be benefited to respond properly with the difficult situation and manage to secrete the adequate hormone. To begin changing the way we react to stress, we'll need to understand how it typically affects the body. If our mind interprets a stressful event as an emergency threat, it triggers an immediate response in the autonomic nervous system. Our stress response kicks in and activates the sympathetic nervous system (SNS). Our body is flooded with hormones like cortisol and norepinephrine, which heighten the senses, increase heart rate and blood pressure, and focus the brain's activity. The parasympathetic nervous system (PNS), which is responsible for physical relaxation and emotional calm, becomes overwhelmed by this sympathetic response. With the sympathetic nervous system in charge and the parasympathetic overwhelmed, we are primed to respond with energy and focus, but also with anger, anxiety, and aggression. Experts say Asanas like Bhujangasana, Naukasana, Salvasana etc. are beneficial for physical stress like stiff neck and back. Yogasans not only work to bring fitness and vigor to physical body, but also harness our will and emotions to improve our power of analysis, insight and vision. They calm the mind and steady the emotions, still not losing the sharpness of intellect which is the key to human progress. The benefits of Yogasanas and Pranayam which are commonly observed help to improve blood circulation in the body, improve complexion, relieve from stress tension and anxiety, recover from chronic fatigue, clean and strengthens lungs, increase vital capacity and tidal volume, makes person slim, flexible and elastic. Improves flexibility, strength and endurance, normalize body weight, cures and helps in prevention of diseases. 20-30 minute meditation sessions a day can have lasting beneficial effects on mental health

and keep away from mental stress. Exercise on a regular basis helps to turn down the production of stress hormones and associated neurochemicals. Elimination of drug use and no more than moderate alcohol use are important for the successful management of stress. In fact, even prescription drugs for anxiety, such as diazepam (Valium), lorazepam (Ativan), clonazepam (Klonopin), or alprazolam (Xanax), can be counterproductive in the same way. Therefore, these medications should only be used cautiously under the strict guidance of a physician. If, however, stress produces a full-blown psychiatric problem, like posttraumatic stress disorder (PTSD), clinical depression, or anxiety disorders, then psychotropic medications, particularly the selective serotonin reuptake inhibitors (SSRIs), are extremely useful. Examples of SSRIs include sertraline (Zoloft), paroxetine (Paxil), fluoxetine (Prozac), citalopram (Celexa), and escitalopram (Lexapro). However, Yoga is the best to get rid of stress, the commonly known stress managed Yogasanas are savasana, salvasana, padmasana, swastikasan, bhujangasana, surya namaskar etc. and Pranayams are bhamri pranayam, nari sodhan pranayam, suryavedan pranayam, sputa sagar pranayam etc. Experts say 30 minutes of regular practicing of meditation expand the depth of mind and makes it calm, prevent stress to remain healthy, fit and wellbeing.

Discussion:

Many of the popular techniques found to reduce stress derive from yoga. Yoga helps to access an inner strength that allows facing the sometimes-overwhelming fears, frustrations, and challenges of everyday life. Practicing of Yoga to regulate the breath and relax the body by gently releasing tension from the large muscle groups, flushing all parts of the body and brain with fresh blood, oxygen, and other nutrients, and increasing feelings of well-being. "Whole body" exercises such as the

Sun Poses are particularly helpful because they encourage a man to breathe deeply and rhythmically. Many exercises can be adapted so a man can do them even in an office chair. A 30-minute exercise routine with breathing, relaxation and meditation help a man to release from stress. Yoga poses are good exercise and can help loosen up the tense muscles in the body. The areas of the body that tend to carry the most stress are the neck, shoulders, and back. But other parts of the body like the face, jaw, fingers, or wrists also can benefit from simple yoga stretches. The Complete Breath technique is a must for anyone who often feels "stressed out." Once learned, the Complete Breath can be used anywhere, anytime, to reduce the severity of a panic attack, to calm the mind, or to cope with a difficult situation. Learning to concentrate simply on the sound of the breath as a man can inhale and exhale evenly and smoothly will help him gently but effectively switch his attention from feelings of anxiety to feelings of relaxation. The practice of Asanas brings purity in tubular channels, firmness to the body and vitality to the body and the mind. Yogasanas are simple action for keeping the internal and external part of the body in good health. Yoga is a method by which one can obtain control of one's latent power. Yoga builds a man's ability to calm, focus, balance, and relax himself. Besides, diet is also important for stress relief because our body associates stress with famine. Meditation 20-30 minutes twice in a day etc. helps a man to manage stress. Regular practices of Pranayam of yoga strengthens the nervous system, the mind becomes calm and capable of concentration. Kriyas a classification of yoga improve activities of the brain and sinuses, allowing the air to flow without obstruction, helps to relieve allergies, colds and sinusitis together with various disorders of the ears, eyes and throat, helps to cool and

smooth the brain, relieve from migraine, cures digestive disorders such as constipation, acidity, indigestion and other digestive upsets, prevent urinary infection and the formation of kidney stones, nauli massages strong its associated parts and organs. Kriyas help to relieve nervous tension, anxiety, depression and insomnia. Kriyas balance the adrenal component of the endocrine system. Kriyas make the mind sharp and the sense keen, and increase the body's resistance to disease and manage stress. Yoga, meditation or other deep breathing exercises help the body and mind relax, while time spent with friends and loved ones triggers make our body to release a "feel good" hormone called oxytocin. 20-30 minute meditation sessions a day can have lasting beneficial effects on mental health and keep away from mental stress. However, the advantages which are available for practicing of Yoga can be summarized as it loosen up the tense muscles in the body, bring a harmonious development of all the muscle of the body, internal organs, nerves and frame, keep a three dimensional effects on body, mind and spirit, secrets hormones from different glands in balanced condition, regulates blood circulation properly and forms antibody to prevent diseases thus Yogasanas make the body strong, therefore, the body and mind do not get weak with the effect of stress. Beside this, Pranayam of Yoga helps in control of breathing, this breathing control exercises give extra energy to heart and lungs hence helps to keep away stress. Meditation on the other hand calms the mind and body in this way Yogasanas manage the stress, keep us to remain healthy, fit and wellbeing.

Conclusion:

A great number of people suffer and die from stress and stress borne diseases every

year. It is seen that Yoga has a lot of benefits if it is done regularly. Asanas, Pranayams, Meditation and Sudhi kriyas of Yoga provide several advantages if these are included in our routine life to perform. 20-30 minute meditation sessions a day can have lasting beneficial effects on mental health. However, the advantages which are available for practicing of Yoga are it loosen up the tense muscles in the body, bring a harmonious development of all the muscle of the body, internal organs, nerves and frame, keep a three dimensional effects on body, mind and spirit, secrets hormones from different glands in balanced condition, regulates blood circulation properly and forms antibody to prevent diseases thus Yogasanas make the body strong, therefore, the body and mind do not get weak with the effect of stress. Beside this, Pranayam of Yoga helps in control of breathing, this breathing control exercises give extra energy to heart and lungs hence helps to keep away stress. Meditation on the other hand calms the mind and body in this way Yogasanas manage the stress. Yoga in real sense makes our mind and body strong from inside, and able to manage stress and keep us healthy, fit and wellbeing. In real sense Yoga builds up a preventive power in the body and mind thus through Yoga stress can be managed. So far the commonly known stress managed Yogasanas are savasana, salvasana, padmasana, swastikasan, bhujangasana, surya namaskar etc. and Pranayams are bhamri pranayam, nari sodhan pranayam, suryavedan pranayam, sputa sagar pranayam etc. Experts say 30 minutes of regular practicing of meditation expand the depth of mind and makes it calm, prevent and maintain stress and keep us to remain healthy, fit and wellbeing.

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