



YOGA IN STRESS MANAGEMENT

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ABSTRACT

Stress is a natural physiological and psychological effort to improve the creativity, productivity, learning skills. Stress becomes harmful when it becomes overwhelming and interrupts the healthy state of equilibrium. So the topic was selected to find out a solution for various health problems due to stress through Emotional and physiological control. Yoga is an ancient scientific approach in the health management. The role of Yoga in spiritual health management is significant which helps to minimize *Rajoguna* and *Tamoguna* and uplift the *Satvaguna*. The *Asanas* mentioned in Yoga provide physical exercises to the body which make the body healthy, improve flexibility, strength, balance, and stamina. Several moving and stationary poses in Yoga, combined with deep breathing exercises, *Pranaya*, Meditation could reduce anxiety, stress, depression, overwhelming fears, frustrations, and challenges of everyday life and so on.

Keywords: Stress, Emotional and Physiological health, *Yogasana*

INTRODUCTION

Stress is defined as a state of mental tension or worry caused by a difficult situation [1].

We all might have gone through the stage of

stress in our day-to-day life at one or another point. To some extent stress is necessary in

our life because it helps to improve the

creativity, productivity, learning skills, and so on [2]. Stress becomes harmful when it becomes overwhelming and interrupts the healthy state of equilibrium that our body system needs to remain in balance. Unfortunately, overwhelming stress has become an increasingly common characteristic of contemporary life. When stress overwhelms different Organs, body prepare for the "fight or flight response." Different hormones like Cortisol, adrenalin get released more to meet the emergency situations [3] where we need to act quickly. Constant release of such hormones could wear the body down leading to several diseased conditions.

Importance of selecting the topic:

Frequent occurrence of stress may turn into stress –induced ailments which affect various organs adversely and could deteriorate the efficiency of organs. Thus, the whole physiological responses get hampered develop hypertension, CAD, Diabetic Mellitus, Migraine, disturbances at psychic level like restlessness, anxiety, fear, insomnia and so on [4]. So to find out a solution for the above problems and to prevent the chances of occurrence of above all disturbances.

Objectives:

- To study about stress and various responses in our body against stress

- How stress can be managed through *Yogāsana*

MATERIALS AND METHODS

Available relevant Ayurveda and Yoga related textbooks, *Samhita* (classical text books), Research articles were referred to gather information regarding stress, Yoga and management of stress.

Literary review

Stress is an organism's response to a threat, challenge or physical and psychological barrier.

Situations such as inattentiveness, lack of sleep, intoxication, stress, mental illnesses and many other factors may interfere with a good flow of communication [5].

Stress happens [6]

- When a situation is not acceptable to us.
- When we want to do/get something but are unable to do so
- When ego is hurt through others feedback, comment etc.,
- When we lose something which we love most or important.
- Stress also occurs due to the fear of future and worry about past and present moment.
- Stress is always due to the perception of mind.

Different people feel different stress levels for the same situations.

Stress is two kinds – Eustress and Distress

[7] Eustress is experienced while involving in entertainments, sports, sex and hobbies. Here we experiences a state of joy at the end of some consciously created tensed moments which would be healthy. But if the stressed moments continue for more period of time or repeatedly, it could affect our mind as well as body adversely and this is called Distress. The two types of Distresses are Acute distress and Chronic distress:

Acute distress - is mainly due to the mental shock followed by an accident, physical assault, rape, sudden severe illness, death of close relatives, associated with memory loss. Such distress could last for few days to few months. This again depend upon the severity and vulnerability of persons ailments. The very most important symptom of acute reaction to stress are anxiety and depression. Shock, Insomnia, restlessness, poor concentration are the other symptoms of distress.

Chronic Distress [8] - our fast life, demanding jobs, family and social environment, work overload, inadequate time period, negative thoughts, insecurity feeling, illness, over ambition, over strained-Relationships, breaking up of relationships, create distress that could persists for several months to years. Chronic distress or anxiety takes a tremendous toll on the body, draining out energy resources and keeping the body in a constant state of stress.

The effects of anxiety are magnified when the body is not exercised: tension in the muscles builds, breathing remains constricted most of the time, and the mind has no rest from the whirling thoughts and feelings that feed the anxiety.

Stress Response

Modern life is full of hassles, deadlines, frustrations, and demands. For many people, stress is so common place that it has become a way of life. Stress isn't always bad. In small doses, it can help you perform under pressure and motivate you to do your best. But when you're constantly running in emergency mode, your mind and body pay the price. You can protect yourself by recognizing the signs and symptoms of stress and taking steps to reduce its harmful effects.

In human, stress creates response at three levels [9]

1. Emotional response
 2. Somatic response
 3. Psychological response
1. Emotional response: Anxiety, Fear, Depression, Anger, Grief are common emotional responses. When trying to suppress forcefully, these emotional reactions percolate into the body to create somatic response.
 2. Somatic response
Whenever man is exposed to a stressful situation, body physiology activates to cope up with the demanding situations

such as pupil dilatation, increased muscular activities, dilated blood vessels, increased breath rate, pulse rate, secretion of hormones. These changes will come back to normalcy once the cause of stress is removed. This is called fight or flight reaction. Similar physiological changes are taking place in all forms of stress. If the intensity and duration is more, it will adversely affect one or more vulnerable organs and causes various disorders like Acidity, Ulcers, Heart ailments, Blood Pressure, Kidney problems, Diabetes.

3. Psychological response

When a stress reaction is occurring repeatedly or its impact is prolonging, the psychological response will occur to manage the situations such as

- a) Coping strategies
- b) Mechanism of defense

Coping strategies are considered to be a conscious process of mental activities with an intension to resolve conflicts, challenges or anxiety. Few such techniques are counseling, sharing the emotions with friends, logically analyzing the situations. At the same time there are few maladaptive coping strategies that could reduce a person's stress for a short period of time such as smoking, drinking, using drugs, sex, self-harm and aggressive behavior etc. which could gradually deteriorate the health [10].

In the second response like mechanism of defense, people might be unconscious or unaware of something that he is expected to know, such as loss of memory.

Other Impacts of sustained and unmanaged stress are [11]

1. Brain continues to operate in higher beta state (15 to 26 cycles per second of electrical impulses (EEG))
2. Continues to trigger the rest of the body mechanism and create stress.
3. Blood pressure remains high that can lead to heart failure, paralysis.
4. Acidity, ulcer, digestive disorders.
5. Renal disorders that could affect Ultra filtration processes.
6. The increased Cortisol level could reduce immunity and makes body susceptible to diseases.
7. Stressful mind induces various hormonal variations on the body which could be as harmful as external chemical/industrial pollution.

How to Manage Stress [12]:

Stress induced diseases, Psychosomatic diseases, Psycho neuroimmunology could be managed to some extent through various systems of medicines. Various recent Research studies and articles mentioned with evidence that Yoga is found to be an effective remedial measure for the prevention and management of stress as well as for the stress induced ailments. We can

manage the stress through Emotional and physiological control.

Emotional Control

- a. Positive thinking and attitude.
- b. Larger view of life
- c. Meditation

Physiological Control

- a. YOGA
- b. Pranayama
- c. Healthy lifestyle and food habits
- d. Have multiple positive energy sources – hobbies, interests.

How to control stress through Yoga, Pranayama & Meditation

In *Yogasutra*, Acharya Patanjali¹⁴ mentioned the term '*Klesha*' which can be correlated with the term distress. In the above classical text book Acharya mentioned few reasons for *Klesha* such as *Avidya* (ignorance), *Rāga* (over attachment), *dvesha* (egoism and aversion), *Abhivesha* (crave for worldly affairs) [15].

In such stressful environment body spends large amount of energy. Gradually the efficiency is deteriorated and quality of life is reduced.

Yoga is an ancient scientific approach in the health management. The role of Yoga in spiritual health management is significant [16]. Along with spiritual health, Yoga teaches us how to control the mind and emotions. Yoga helps to minimize *Rajoguna* and *Tamoguna* and uplift the *Satvaguna*. The *Asanas* mentioned in Yoga provide

physical exercises to the body which make the body healthy, improve flexibility, strength, balance, and stamina. Several moving and stationary poses in Yoga, combined with deep breathing exercises could reduce anxiety, stress, depression, overwhelming fears, frustrations, and challenges of everyday life and so on [17].

Yoga is considered a mind-body type of complementary and alternative medicine practice which can bring the physical and mental disciplines together to achieve peacefulness of body and mind, helping you relax and manage stress and anxiety. We need to break the negative cycle at each point and turn it into a positive spiral. Yoga has therapeutic applications where different yoga postures are practiced for the treatment of unhealthy conditions and to reduce structural, Physiological, emotional and spiritual pain or sufferings. This will improve respiratory and cardiovascular functions. Other health benefits of yoga include [18]

1. **Stress reduction** A number of studies have shown that yoga can help to reduce stress and anxiety. It can also enhance your mood and overall sense of well-being.
2. **Improved fitness** Practicing yoga can lead to improved balance, flexibility, range of motion and strength. And this means you're less likely to injure

yourself in other physical endeavors or in your daily activities.

3. Yoga might also help alleviate chronic conditions, such as depression, pain, anxiety, chronic pain and insomnia.

Yoga comprises of mainly [19],

- Yama (control or abstinence)
- Niyama (observances)
- Asana (comfortable posture for practicing meditation)
- Pranayama (breath controlling techniques)
- Meditation

Yogāsanas

Asana is one of the eight limbs of classical Yoga, which states that poses should be steady and comfortable, firm yet relaxed

helping a practitioner to become more aware of their body, mind, and environment. The 12 basic poses or *Asanas* are much more than just stretching. They open the energy channels, *chakras* [20] and psychic centers of the body while increasing flexibility of the spine, strengthening bones and stimulating the circulatory and immune systems. Along with proper breathing or pranayama, *Asanas* calm the mind. With regular practice one can ensure overall physical and mental health and the possible prevention of diseases such as diabetes, hypertension and arthritis. In time, performing the poses slowly and consciously, becomes a mental exercise in concentration and meditation (**Figure 1**).



Figure 1: Yogāsanas

Benefit of Asanas [21]

1. Exercises different parts of the body.
2. Combine with breathing
3. Postures do Stretch and hold, compress and hold
4. Creates flexibility and hollowness, lightness and immunity.
5. Helps in flow of nutrients, oxygen, impulses and flow of energy in the body.
6. Stimulate gastric fire or *Agni*.
7. Some *asana* acts as an antidote against some poisons.eg: *Bhadrasana*.

Prānāyāma [22]: The word Pranayama means extension of Breath. *Prana* is the vital energy which governs the entire functions of body and mind. As long as *Prana* flows life exists. When *Prana* stops life came to be an end. Hence *Prana* should be protected or regulated through a scientific pathway or technique of Prānāyāma. *Acharya* Patanjali defines *Prānāyāma* as breaking the cycle of Inhalation and Exhalation. By practicing *Prānāyāma* the musculoskeletal functions, CNS functions, Metabolic functions such as absorption and digestion, blood circulation get regulated. The benefits of pranayama are it increases the removal of carbon dioxide from the blood plasma by creating exhale pressure in lungs for osmosis, Increases oxidation and liberation of energy in every cell of the body, Stimulates the pituitary

gland which is the master gland that control or regulate other endocrine glands [23].

Meditation or *Dhyana*: Daily practice of complete relaxation and meditation is also essential - even a few minutes of meditation during your work day can make a difference. If our mind wanders to other thoughts the daily training in focusing the mind on stillness or focusing on our breathing or focusing our attention on a single repetitive action, such as our breathing, a few repeated words, flickering light from a candle, or other forms of mindfulness meditation encourage you to follow and then release internal thoughts or sensations and will teach us how to consciously quiet our mind . During *Dhyana*, the practitioner will be able to visualize or imagine on the object without any effort or strain, which he focused during *dharana* [24].

CONCLUSION

From the above detailed study, it is clear that Yoga helps us to access our inner strength which help or allow us to face the overwhelming fears, frustrations, and challenges of our day to day every life. Stretching muscles and ligaments results in an increase in the blood supply to the muscles, ligaments and relax them by alleviating tension, stress, and pressure in the nerves in that area. Stress relief also occurs through Deep breathing practices or *Prānāyāma*. During retaining the yoga postures, breath will become slow and deep.

This increases oxygen and “Prana” supply to the target organ or gland which helps to reduce stress and anxiety. Regular Yoga practice daily helps 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, clear all stress and depression and rejuvenate the life.

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