



Uses of yoga therapy in daily life

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Abstract

Yoga is one of the six foundations of Indian philosophy and has been used for millennia to study, explain, and experience the complexities of the mind and human existence. Patanjali's Yoga sutras outline a skillful way of conducting life that fosters moderation and harmony.

The Yoga way of life encompasses the philosophy of Karma Yoga (path of detached action), Jnana Yoga (knowledge of self), Bhakti Yoga (trust in the supreme order) and Raja Yoga (asana, pranayama, meditation, etc). The various meditation techniques work at the mental level, all these practices are intended to develop a certain type of awareness within oneself which in turn brings about a change in their emotional functions.

Keywords: Yoga, Therapy, Stress

Introduction

Many researchers have noted the benefits of exercise in diminishing the stress response. Yoga has been recommended and studied in relationship to stress, although the studies are less scientifically replicable. Nonetheless, several researchers claim highly beneficial results from Yoga practice in alleviating stress and its effects.

The findings from empirical studies on Yoga revealed that long-term practitioners of Yoga had acquired a remarkable voluntary control over their autonomic processes which helped them in coping with psychological stress.

Many of the yoga-based programs that have been widely studied in the use of stress reduction are being formulated and customized as per the corporate needs. The mindfulness-based stress reduction program includes guided instruction in mindfulness meditation practices, yoga and gentle stretching, inquiry exercises to enhance awareness, individual instruction, group dialogue and home assignments. The Yoga classes are to be designed incorporating breathing techniques exercises for strength, vitality, and flexibility, guided relaxation and meditation.

Meditation has proved to be of great help to combat stress and revitalize the mind. After doing meditation for 10 to 20 minutes once or twice a day, stress is seemed to be drifting away with positive energy. Meditation that cultivates mindfulness is particularly effective at reducing stress, anxiety, depression, and other negative emotions. Meditation is a skill tool for Life Enhancement, Workplace Efficiency, Stress Management, Emotional and Spiritual Fulfillment. It helps in balancing mind and body and increases mental alertness, concentration – resulting in clarity of decision making.

A recent survey found that 60% of general practitioners wanted educational material to help in the management of stress, and that 28% of those seeking education were experiencing significant levels of stress. Experiments have

shown that meditators maintained psychological equilibrium under stress more effectively than non-meditators. The art of meditation has made its way into the corporate environment and is one of the best way to reduce stress in the workplace.

The idea behind meditation is to consciously relax your body and focus your thoughts on one thing for a sustained period. Based on the various clinical relaxation researches conducted by various psychologists worldwide, it is considered that breathing is an important component of the relaxation response. Author reports that certain meditation styles bring some biochemical and physical changes in the body, which may be collectively referred to as the "relaxation response" that includes changes in metabolism, heart rate, respiration, blood pressure, and brain chemistry.

It is crystal clear that there is a positive and significant relationship between stress and the practices of yoga & meditation. It is moral responsibility of the organizations to implement upon such practices that would surely build right attitude and outlook of the problems at the work place to the employees. Stress can be minimized if companies take the right initiatives at right time in right direction. Stress-free employees perform better, work harder, happier and are more committed to the organization as compared to their counterparts.

Research Study

Medical yoga is defined as the use of yoga practices for the prevention and treatment of medical conditions. Beyond the physical elements of yoga, which are important and effective for strengthening the body, medical yoga also incorporates appropriate breathing techniques, mindfulness, and meditation in order to achieve the maximum benefits. Multiple studies have shown that yoga can positively impact the body in many ways, including helping to regulate blood glucose levels, improve musculoskeletal ailments and keeping the cardiovascular system in tune. It also has been shown to have

important psychological benefits, as the practice of yoga can help to increase mental energy and positive feelings, and decrease negative feelings of aggressiveness, depression and anxiety.

Within the past decade, yoga has infiltrated not only Western culture, but also Western medicine. The more we learn about this ancient practice, the more we realize that its benefits go far beyond increased flexibility and muscle tone. A common misunderstanding is that yoga predominantly focuses on increasing flexibility; however, although Hatha Yoga, or the physical practice of yoga, does emphasize appropriate postural alignment, musculoskeletal strength and endurance as well as balance, the study and practice of yoga incorporates mindfulness-based practices such as mindful breathing techniques, focused concentration, meditation and self-reflection.

Modern medicine has made enormous progress in controlling communicable diseases over the past century, such that it is now the non-communicable diseases (NCDs) that have reached epidemic proportions and cause the majority of deaths worldwide. The World Health Organization (WHO) estimates that 80% of NCD deaths are due to four main disease types: cardiovascular disease, cancer, diabetes, and respiratory diseases.

Recent research has shown that yogic and mindfulness-based practices can positively impact the body in many ways, including helping to regulate blood glucose levels and keeping the cardiovascular system healthy. It also has been shown to have important psychological benefits, as the practice of yoga can help to increase alertness and positive feelings, and decrease negative feelings of aggressiveness, depression and anxiety.

Medical yoga is defined as the use of yoga practices for the prevention and potential treatment of medical conditions. Beyond the physical elements of yoga, which are important and effective for strengthening the body, medical yoga also incorporates appropriate breathing techniques, mindfulness, meditation and self-reflection/study in order to achieve the maximum benefits. Medical Yoga Therapy or “Yoga Chikitsa” is the dynamic state of physical and mental ease, coupled with spiritual well-being. Yoga helps one to develop a positive state of health by not only treating illness, but also helping one to understand the underlying causes of disease.

Medical yoga therapy, ideally, is an individualized, personalized and holistic approach that takes into account not only the patient’s mind, body and spirit, but also their family, support network, work situation, and culture, as part of the patient’s individualized treatment plan. As an example, if one is diagnosed with anxiety, a physician trained in medical yoga may prescribe specific breathing techniques (pranayamas), calming postures (asanas), mindfulness-based practices and/or meditation, as well as other lifestyle guidance. This type of therapy does not incur the potentially adverse effects of medications, and can produce benefits to the patient, long after their relationship with the health provider ends.

Discussion

The mindfulness and meditation aspects of yoga are ways of training the mind so that one is not distracted and caught up in its endless churning thought stream. These practices build

resilience, help the patient cope with stress and manage potential triggers for anxiety. They can also promote self-reflection that may uncover the source(s) of one’s anxiety. If necessary, anti-anxiety medications and/or psychotherapy may be used in tandem; medical yoga in such cases is strongly adjunctive and complementary.

Yoga is most powerful when it changes the patient’s general health outlook, changing the emphasis from reactive to proactive health management. The yogic definition of health or “svastha” is when the functions of the body and mind are in harmony so that they can turn inward to reach the goal of Self-realization. In yogic terms, when you are really your “Self”, you are truly at “ease”. It is the loss of the Self that creates “dis-ease”. This is a bit different than the Western concept of health, which is often defined as “the absence of disease.” In contrast, the yogic concept is that “disease is the absence of vibrant health”. Accordingly, this way of thinking reaffirms the understanding that the nature of yoga is to find one’s eternal Self of health, peace and well-being.

Yoga-based practices of postures (asanas) and movement sequences are usually taught in conjunction with some type of breathing and/or meditation technique. This type of mindful movement with slow, rhythmic breathing is more likely to promote parasympathetic and vagal tone compared to other forms of exercise.

Improved vagal tone is reflected by increased heart rate variability (HRV), which is the variation in the time interval between heartbeats. This physiologic phenomenon can be predictive of how readily the heart rate returns to normal, or quiets down, after increasing in response to a stressor. Decreased HRV is associated with poorer myocardial function, often seen after a myocardial infarction, and is seen with increased sympathetic activity. Increased HRV with high frequency activity is associated with increased parasympathetic activity. Yogic breathing techniques—in particular, alternate nostril breathing, which involves breathing through the left and right nostril alternately—has been associated with increased parasympathetic activity, increased HRV and decreased systolic blood pressure.

Slow and rhythmic breathing has also been shown to promote the release of prolactin and the hormone oxytocin, which can foster feelings of friendship, calmness and bonding to others (released during childbirth which may help the mother relax and bond with her newborn during a very painful process). These yoga practices also reduce circulating levels of cortisol and have been demonstrated to reduce the manifestations of stress. With practice, there is decreased firing from the locus coeruleus, which is the principal site in the brain for synthesis of norepinephrine in response to stress and panic. This decreased norepinephrine output helps the body to relax and quiet down with reduced respiratory rates and heart rates.

Significance of the Study

It appears that formal meditation practice can change both brain structure and function. It has been found that people who do more meditation practice develop more robust brain structures in certain areas. Multiple studies have shown that yogic practices such as mindful meditation can increase both cortical thickness and gray matter, particularly in areas controlling emotional regulation and executive functioning.

These regions notably include the insula, the ventromedial pre-frontal cortex and anterior cingulate cortex (ACC).

Meditation has been shown to increase the thickness of the left hippocampus, the region of the brain that functions in the formation of long-term memory, emotional regulation and cognition, as well as being a critical area of the brain that plays a vital role in the resiliency to chronic stress and depressive states, possibly due to expression of hippocampal neurotrophic protein (brain-derived neurotropic factor or BDNF).

Resiliency to stress, stress-related depression and post-traumatic stress are housed in the hippocampus—multiple studies have shown that increased hippocampal activation correlated negatively with post-traumatic stress disorder (PTSD) and depression symptoms, and positively with resilience.

Conclusion

As meditation, mindfulness practices and yoga have been moving more and more into the mainstream, it is becoming more apparent that these practices may work to keep our minds and bodies from withering with age by potentially stabilizing, and even lengthening telomeres. Telomeres are small, repetitive, chromosomal sequences found at the end of chromosomes which protect the chromosome from deterioration and cell death.

They keep the chromosome stable. Telomere shortening, or unraveling, affects how quickly cells age. As they shorten, the chromosome's structural integrity weakens. Telomere length has been found to be a prognostic marker of aging, disease and premature morbidity in humans. Shorter telomeres are associated with cell aging, cell death, premature aging and a broad range of aging-related diseases, including cardiovascular disease, cancer, stroke, dementia, obesity, osteoporosis, Alzheimer's, macular degeneration, acquired immunodeficiency syndrome (AIDS), and osteoarthritis. They have also been associated with pediatric syndromes such as Progeria, Cri-du-chat, Down's syndrome, tuberous sclerosis, dyskeratosis congenita and Fanconi anemia.

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