

An Overview on the Benefits of Yoga

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ABSTRACT: *In the realm of yoga, there are eight limbs that assist with many elements such as body and mind synchronization, creating positivity in the mind, and keeping the body healthy and fit so that the body's functioning improves. In today's world, a wide range of diseases and deformities exist. The majority of the events occur as a result of imbalanced diet and other factors. The mind is always wandering and rebelling, never concentrating on the present moment. The mind's duty is to think, and it is constantly interpreting everything. This pattern of habit is seen, felt, and experienced, and it is changed via action and attitude. Many individuals practice yoga to improve their health and well-being, increase their physical fitness, reduce stress, and improve their quality of life. They may also be dealing with particular health issues including back pain, neck pain, arthritis, and anxiety. Yoga has generally outperformed control and waitlist control conditions, but not always outperformed treatment comparison groups such as other types of exercise. More randomized controlled trials comparing yoga to physical exercise groups are required. It is morally problematic to assign individuals to inactive control groups after establishing the physical and mental health advantages of yoga. For cost-effectiveness and everyday practice, shorter sessions should be explored.*

KEYWORDS: *Cost effective, Disease, Deformity, Rebellious, Yoga.*

INTRODUCTION

Yoga is a philosophical method of exercise and meditation that originated 2000-4000 years ago in what is now India. There are many different types of yoga, each with its own set of practices, but all with the same goal of controlling the mind and body. Postures (asanas) that are maintained for a certain amount of time, regulated breathing exercises (pranayama), and meditation are all common components in various forms. Yoga practice aims to aid the growth and integration of the body, mind, and breath in order to create structural, physiological, and psychological benefits. In particular, the development of a pain-free, strong and flexible body, a balanced autonomic nervous system that allows all physiological systems to operate effectively, and a peaceful, clear, and serene mind [1], [2]. Yoga is a psychological science with philosophical overtones. Patanjali begins his Yoga method by saying, "Yogahs-chitta-vritti-nirodhah," which means "yogahs-chitta-vritti-nirodhah," which means "yogahs-chitta-vritti-nirodhah," which means "yogahs-chitta-vritti-nirodhah" Patanjali does not go into the intellectual underpinnings of the need to regulate one's mind, which are found in Samkhya and Vedanta. Yoga, he says, is the regulation of the mind, the restriction of the thought-stuff.

Yoga is a science based on personal experience. The most significant advantage of yoga is that it helps us to maintain a healthy bodily and mental state. Yoga may help to slow down the aging process, which is essentially an artificial state produced primarily by autointoxication or self-poisoning. We can substantially decrease the catabolic process of cell degradation by keeping the body clean, flexible, and properly lubricated. Yogasanas, pranayama, and meditation must all be combined to get the full advantages of yoga [3]–[6]. Yoga is more faithful to its original principles as a way of life. It consists of asana, controlled breathing (pranayama), and mindfulness of the mind-ruling yoga sutms (principles). Yoga practice on a regular basis improves mind-body awareness, which is important in diabetes self-management of food and exercise. Yoga, according to Patanjali, consists of eight stages or limbs, each of which is equally essential and connected as a whole. Discriminative enlightenment or self-realization is the purpose of these eight limbs. However, the focus will be on the health advantages. The following are the eight steps or limbs of yoga:

- Yama: Restraint codes, abstinences, and self-control.
- Observances, practices, and self-training are all examples of Niyama.
- Asana: Figure 1 depicts a meditation pose.
- Pranayama: Breath and prana expansion, regulation, and control.
- Pratyahara: Sense withdrawal and inner focus.
- Dharana (concentration) is the sixth step.
- Dhyana is the Sanskrit word for meditation.
- Samadhi: Perfected focus, deep absorption, meditation in its highest condition.

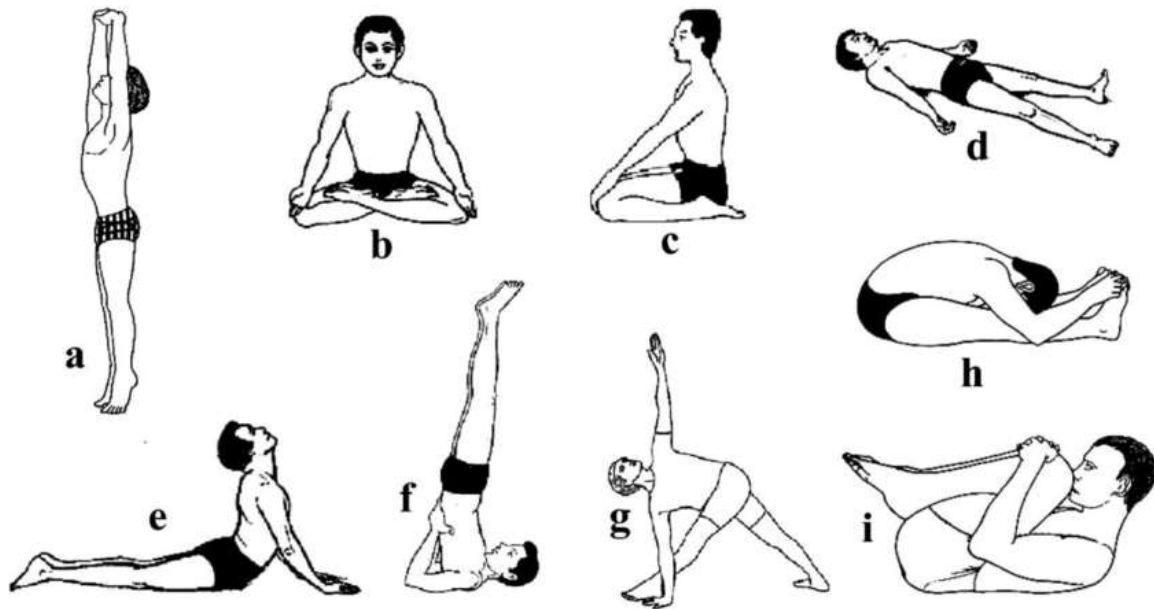


Figure 1: Illustrates various popular asanas [7].

Yoga lifestyle (Healthy Habits):

Swami Satchidananda says, "When you accomplish anything, do it with your whole mind." Don't take shortcuts. Whatever you do, give it your whole attention. Yoga is what it is. It is not enough to go into a corner, sit with your spine straight, and then perform some japa or breathing and call it Yoga. Yoga is everything to me. Yoga is everything that you do. When you begin doing anything, do just that – 100% of the time. The Bhagavad Gita states, 'Yogaha karmasu kaushalam.' Yoga entails excellence in all of your actions.

Relative Health Benefits of Exercise and Yoga:

Health Benefits of Exercise:

Exercise and massage were recommended for the treatment of rheumatism by the ancient Indian system of medicine (Ayurveda) as early as the ninth century B.C., and the Greek philosopher Hippocrates ('the father of medicine') acknowledged the benefits of exercise for physical and mental health in the 4th century B.C. In recent years, a body of epidemiologic research has found varying degrees of inverse associations between habitual exercise and the risk of several chronic diseases, including coronary heart disease, thromboembolic stroke, hypertension, Type 2 diabetes mellitus, osteoporosis, obesity, anxiety, and depression. Furthermore, during the past 20 years, a rising body of research has revealed "convincing" evidence of an inverse relationship between physical exercise and the incidence of colon cancer. There's also evidence of a 'possible' inverse relationship between physical activity and the risk of

other cancers, such as postmenopausal breast and endometrial cancer, as well as limited 'suggestive' evidence of a similar relationship between physical activity and lung, pancreatic, and premenopausal breast cancer.

Health Benefits of Yoga:

Yoga's relative health benefits in respect to illness risk and its function in chronic disease management are less well understood. Studies compared the physiological responses elicited by yoga practice to those elicited by more traditional types of exercise. Some studies have shown that the heart rate response to average yoga sessions in healthy individuals at normal ambient temperatures is comparable to low-intensity walking exercise. This intensity of exercise falls short of the current recommended level of physical activity for maintaining health and cardiovascular fitness. Other studies, on the other hand, have shown contradictory findings in healthy individuals, with greater levels of cardiopulmonary stress reported during yoga sessions. In addition, some (but not all) studies in healthy individuals who followed yoga practice programs saw improvements in cardio metabolic health indices. Improvements in maximum oxygen capacity, muscular strength, flexibility, and blood cholesterol profile have been reported in a number of single group (uncontrolled) studies (15), as well as reduced physiological effort at submaximal exercise intensities and a lower level of perceived exertion at maximal exercise capacity. Yoga may be able to offer a sufficient degree of cardiopulmonary stress to produce health benefits, based on these cardio metabolic adjustments. Improved pulmonary inspiratory and expiratory pressures, visual and auditory response times, and weight loss in overweight people have all been documented as additional advantages of yoga practice in healthy people. While some studies have found no improvement in cardiopulmonary variables following yoga programs, the actual level of physical exertion experienced during a session, and thus the stimulus for cardio metabolic adaptations, is likely to be heavily influenced by the type of yoga, the practitioner's level of experience, and the ambient temperature during the session. Yoga practice has a spiritual component as well as particular breathing techniques not seen in other types of exercise, which may have additional health advantages.

Role of Yoga in maintaining the Physical Health:

Yoga is becoming more important in the maintenance of physical and mental wellness. Yogic Intervention has been proven to have a positive impact on overall well-being. Yoga may be used as a preventative strategy. Another research, also conducted in Toronto, Canada, clearly shows that physically active people are less likely than sedentary people to acquire hypertension. After 4-14 weeks of yogic practices, individuals with angina and cardiovascular risk factors exhibited a favorable response in their lipid profile. Training raises HDL cholesterol, according to a research conducted in Ontario, Canada, and this view has been confirmed by many investigations. In his research, Kumar K found that practicing Yoga cleaning (Shatkarma) reduced the levels of blood glucose and serum cholesterol in human participants. In another research, it was discovered that yogic intervention had an effect on the participants' overall body weight. Yoga has a beneficial effect on physical health on a variety of criteria of general health variables.

Yoga is Helpful in Managing Common Disorder:

Diabetes, hypertension, obesity, and joint issues have become increasingly prevalent in recent years. Yogic intervention has a substantial impact on diabetics' blood glucose levels. It has been shown that individuals with rheumatoid arthritis who participated in a yoga program for three months had stronger handgrip strength than those who did not. In their research, Negi A & Kumar K discovered that Yogic Intervention had a substantial impact on R A Factor in Gout Patients. Yoga practice has also been

shown to lower blood pressure in individuals with hypertension. Another research discovered that yogic intervention had a substantial impact on blood uric acid levels in Gout patients.

Yoga improves cardio-respiratory efficiency:

Yoga exercise increases the strength of both expiratory and inspiratory muscles, according to increased inspiratory and expiratory pressures. Muscles of the respiratory system are similar to those of the skeletal system. Isometric contraction, which is used in yoga, is known to improve skeletal muscular strength. The length of time it takes to hold a breath is determined by the initial lung capacity. The frequency and amplitude of involuntary respiratory muscle contractions reduces as lung capacity increases, reducing the pain of breath retention. During yoga practice, one deliberately and persistently overrides the inputs to respiratory centers, gaining mastery over breathing. This, along with increased cardio-respiratory function, may explain why yoga practitioners can hold their breath for longer.

Yoga balances Autonomic nervous system:

The sympathetic nervous system and the parasympathetic nervous system are the two limbs of the autonomic nervous system. Individual asana and pranayam practices may influence the sympathetic or parasympathetic nerve systems in different ways, but the overall result of yoga practice is parasympathetic dominance. Vempati and Telles (2002) investigated the impact of yoga-based guided relaxation on autonomic variables and discovered that the power of the low frequency component of the heart-rate variability spectrum decreased while the power of the high frequency component increased, implying a reduction in sympathetic activity. Subjects with a baseline ratio of LF/HF > 0.5 exhibited a substantial reduction in the ratio following guided relaxation, while those with a ratio of or = 0.5 showed no change. The findings indicate that following yoga-based guided relaxation, sympathetic activity reduced.

LITERATURE REVIEW

D. Wang et al. discussed a review on Benefits of Yoga among students[8]. The results of a qualitative assessment of a yoga intervention program for urban middle and high school students in New York City public and charter schools are presented in this research. Six focus groups with students who took part in a year-long yoga program were performed to evaluate their views of mental and physical advantages, as well as obstacles and difficulties. Students reported improved self-regulation, mindfulness, self-esteem, physical conditioning, academic performance, and stress reduction as advantages of yoga. Lack of time and space are two of the most significant obstacles to a yoga practice. It is explored to what degree the advantages received are linked to one another. There are also suggestions for future research and school-based programming.

Chandra Nanthakumar discussed a review on Benefits of Yoga in children[9]. In Malaysia, the number of youngsters suffering from stress and anxiety is increasing. Mind-body treatments such as mindfulness therapy, meditation, and yoga have been used to decrease and/or manage the psychological consequences of stress and anxiety in many different nations, according to evidence. The intervention of yoga as a meditative movement practice in helping schoolchildren manage stress and anxiety is examined in this review study. A variety of databases, including PubMed/MEDLINE and PsycINFO, were used to find articles. This review includes both peer-reviewed and non-peer-reviewed papers published in English. All of the research looked at included some kind of contemplative movement practice. The yoga pathways of asanas (postures), pranayama (expansion of life force), dharana (concentration), and dhyana (meditation) were all included in the intervention. A total of eight papers were evaluated after meeting the inclusion criteria. The results of this study show that yoga may help

with stress management and anxiety reduction, among other things. Despite the variability and sample size constraints in most, if not all, of the research examined, yoga seems to be an effective technique for helping children deal with stress and anxiety. It seems that including yoga into the physical education curriculum in Malaysian schools will be beneficial to pupils.

A. Ross et al. discussed a review on Benefits of yoga and Exercise [10]. Exercise is seen as a safe and effective way to improve and maintain physical and mental health. Yoga improves physical and mental health by down-regulating the hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system, according to a growing body of research (SNS). The goal of this article is to offer a comprehensive overview of the evidence comparing the effects of yoga and exercise on a range of health outcomes and illnesses. In almost every outcome evaluated in the trials analyzed, yoga treatments seemed to be comparable to or better than exercise, with the exception of physical fitness. Yoga seems to be as beneficial as or better than exercise in improving a range of health-related outcome measures in both healthy and sick populations, according to research comparing the benefits of yoga and exercise. Future clinical studies will be required to look at the differences between exercise and yoga, especially how the two modalities affect the SNS/HPA axis. More research utilizing rigorous methods is required to look at the health advantages of different kinds of yoga.

DISCUSSION

Yoga is a mind-body exercise. Yoga incorporates physical postures, breathing methods, and meditation or relaxation into many forms. To improve mental and physical well-being, it incorporates exercise, meditation, and breathing methods. There are numerous different kinds of yoga, as well as many different disciplines within the practice. Prithvi (earth), jal (water), agni (fire), vayu (air), and akasha (mind) are the five components of Ayurveda, the sister science of yoga and one of the oldest medicinal systems being practiced today (ether or space). Yoga increases strength, balance, and flexibility, as well as back pain alleviation and arthritic symptoms. It also improves heart health, relaxes you to help you sleep better, and may result in more energy and happier emotions.

CONCLUSION

Yoga and meditation are gaining popularity among the general population as a result of their positive benefits on mental and physical health. Yoga has been utilized as a comprehensive relaxation technique that is helpful against hypertension, obesity, anxiety, sleeplessness, and aging since ancient times. Yoga practice is safe and may provide numerous health advantages to practitioners, whether they are young, elderly, healthy, recovering from sickness, or seeking for a therapeutic alternative to help them manage a chronic disease, according to the current data. It's essential to remember that the majority of positive data to far has come from research of low to mediocre methodological quality, such as non-randomized controlled trials and uncontrolled, single group studies. Furthermore, many of the research accessible in the scientific literature have been performed in India, and there is a scarcity of high-quality studies including Western populations. These methodological flaws, however, must be balanced against the intrinsic limits of RCT design.

The connection between the mind and body was extensively recognized in ancient wisdom and eastern learning, especially in relation to Yogic sciences, but subsequently formed an artificial distinction between these two components. Modern medical science is only concerned with the body as a separate entity from the mind. However, both contemporary medical practitioners and Indian tradition therapists have begun to recognize the significance of psychosomatic connections. Scientific study has shown without a shadow of a doubt that yoga practices improve the balance of autonomic function and

metabolic rate on the one hand, and neurohumoral processes on the other, resulting in a state of physical and mental well-being. This indicates that physiological and psychological conditionings are intertwined and act at the same time.

REFERENCES

- [1] R. Thiyagarajan *et al.*, “Additional benefit of yoga to standard lifestyle modification on blood pressure in prehypertensive subjects: A randomized controlled study,” *Hypertens. Res.*, 2015, doi: 10.1038/hr.2014.126.
- [2] K. Rajoria and S. K. Singh, “Therapeutic benefits of Raj yoga – a review,” *Indian Journal of Traditional Knowledge*. 2017.
- [3] G. K. Alexander, K. E. Innes, T. K. Selfe, and C. J. Brown, “‘More than I expected’: Perceived benefits of yoga practice among older adults at risk for cardiovascular disease,” *Complement. Ther. Med.*, 2013, doi: 10.1016/j.ctim.2012.11.001.
- [4] S. B. S. Khalsa, L. Hickey-Schultz, D. Cohen, N. Steiner, and S. Cope, “Evaluation of the mental health benefits of yoga in a secondary school: A preliminary randomized controlled trial,” *J. Behav. Heal. Serv. Res.*, 2012, doi: 10.1007/s11414-011-9249-8.
- [5] Y. Danielly and C. Silverthorne, “Psychological Benefits of Yoga for Female Inmates,” *Int. J. Yoga Therap.*, 2017, doi: 10.17761/1531-2054-27.1.9.
- [6] K. B. Bonura, “The psychological benefits of yoga practice for older adults: evidence and guidelines,” *International journal of yoga therapy*. 2011, doi: 10.17761/ijyt.21.1.j4ll204h12535874.
- [7] “Various-Popular-Asanas-Postures-Useful-for-Physical-and-Mental-Health-a-Tadasana.” https://www.researchgate.net/figure/Various-Popular-Asanas-Postures-Useful-for-Physical-and-Mental-Health-a-Tadasana_fig1_301790362 (accessed Aug. 17, 2017).
- [8] D. Wang and M. Hagins, “Perceived benefits of yoga among urban school students: A qualitative analysis,” *Evidence-based Complement. Altern. Med.*, 2016, doi: 10.1155/2016/8725654.
- [9] C. Nanthakumar, “The benefits of yoga in children,” *Journal of Integrative Medicine*. 2018, doi: 10.1016/j.joim.2017.12.008.
- [10] A. Ross and S. Thomas, “The health benefits of yoga and exercise: A review of comparison studies,” *Journal of Alternative and Complementary Medicine*. 2010, doi: 10.1089/acm.2009.0044.

