



Yoga-Clinical Research Review

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Abstract

In today's modern life various type of disease and deformity takes place most of the things takes place due to unbalanced food, & other. In the world of yoga there are —Eight limbs path which helps in different aspects like coordination of body and mind and helps to create positivity of mind and help the body healthy and fit by which the functioning of the body improves. Many people who practice yoga do so to maintain their health and well-being, improve physical fitness, relieve stress, and enhance quality of life. The mind is always wondering and being rebellious, never focusing on the moment. It is the mind job to think, it is relentlessly interpreting everything. In addition, they may be addressing specific health conditions, such as back pain, neck pain, arthritis, and anxiety. Basically yoga has been more effective than control and waitlist control conditions, although not always more effective than treatment comparison groups such as other forms of exercise. Having established the physical and mental health benefits of yoga makes it ethically questionable to assign participants to inactive control groups.

Keywords: Yoga, Cost effective, disease, deformity, rebellious

Introduction

Yoga is a philosophical system of exercise and meditation originating in what is now India 2000-4000 years ago. There are many forms of yoga which differ in specific practices, while maintaining the purpose of directing the mind and body ⁽¹⁾. Common elements of many forms include postures (asanas), which are held for a certain period of time, controlled breathing exercises (pranayama) and meditation. Yoga practice has the general aim of facilitating the development and integration of the body, mind and breath to produce structural, physiological and psychological effects ⁽²⁾. Specifically, the development of a strong and flexible body which is free of pain, a balanced autonomic nervous system enabling all physiological systems to function optimally and a calm, clear and tranquil mind ⁽³⁾. Yoga is an experiential science. The most important benefit of yoga is it balances our physical and mental conditions. The aging process, which is largely an artificial condition, caused mainly by autointoxication or self-poisoning, can

be slowed down by practicing yoga (Alleger, I. 2007). By keeping the body clean, flexible and well lubricated, we can significantly reduce the catabolic process of cell deterioration. To get the maximum benefits of yoga we need to combine the practices of yogasanas, pranayama and meditation.

Hatha yoga is the most common form of yoga practiced in Western societies. It involves asana to develop strength, flexibility, balance and the co-ordination of the mind, body and breath, in combination with pranayama and meditation exercise to calm the mind and develop self awareness⁽⁴⁾. The different styles of hatha yoga that have developed are characterized by the rate at which asanas are performed, the physical intensity and level of difficulty, the relative emphasis on body alignment and relaxation and the ambient temperature in which it is practiced⁽⁵⁾. Bikram yoga is a style that was synthesized from traditional yoga methods by Bikram Choudhury. It is performed in a warm/hot environment (~105 degree F, at least 40% humidity) for 90 minutes and comprises a set series of 26 postures as well as breathing exercises. Yoga as a way of life is more true to its ancient tenets. It constitutes asana, regulated breathing (pranayama), and awareness of yoga sutms (principles) that govern the mind. Regular practice of yoga enhances awareness of mind and body, which is needed in the self-management of diet and exercise plan in diabetes. In this review article the emphasis will be on health benefits. The eight steps or limbs of yoga are as follows:

1. Yama: Codes of restraint, abstinences, self regulations
2. Niyama: Observances, practices, self-training
3. Asana: Meditation posture
4. Pranayama: Expansion of breath and prana, regulation, control
5. Pratyahara: Withdrawal of the senses, bringing inward
6. Dharana: Concentration
7. Dhyana: Meditation
8. Samadhi: Deep absorption, meditation in its higher state, the state of perfected concentration.

Yoga Lifestyle is about two actions: "cleaning the mirror" and "spreading the Light". The mirror is the mind and body. They have to be clean and pure to catch the light in the first place. Yoga lifestyle is therefore about purifying the mind and keeping the body healthy.

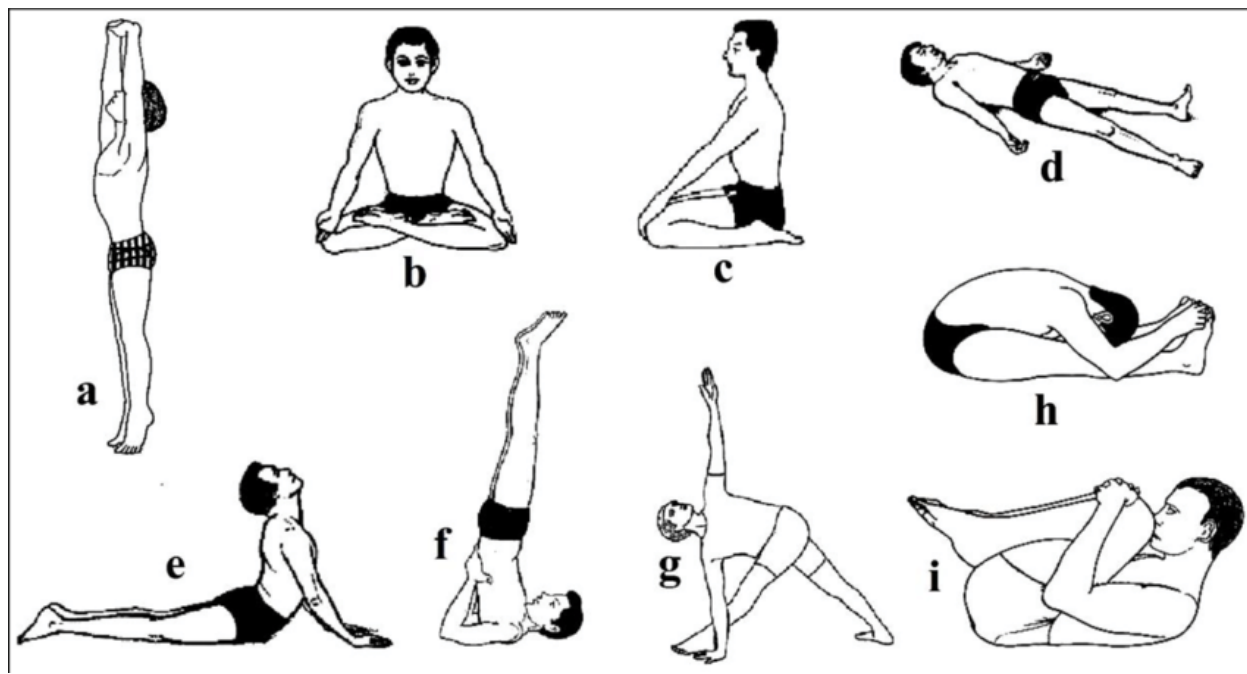


Fig: Various Popular Asanas (Postures) Useful for Physical and Mental Health. (a) Tadasana; (b) Padmasana; (c) Vajrasana; (d) Shavasana; (e) Bhujangasana; (f) Sarvangasana; (g) Trikonasana; (h) Paschimottasana; (i) Pawanmuktasana.

Aim of this study

The majority of available yoga studies in the published literature have been conducted with adults, although studies of children and young adults have also been undertaken. The Aim of review study was to search the scientific literature, primarily seeking out systematic reviews, critical reviews and narrative reviews that have included studies with a focus on the health benefits of yoga in healthy individuals and clinical populations. Yoga is practiced widely for fitness and wellbeing in health clubs, community centres and schools. This popularity has created a need for well controlled research and clinical trials to evaluate its efficacy for improving general health and preventing disease, and to evaluate its role as an adjunctive or complementary therapy for the management of pain or chronic diseases. Hence, the review was focused on yoga more generally, and provides an overview of studies that investigated the health impacts of different yoga styles performed at normal ambient temperatures.

Health benefits of Exercise

Evidence for the use of exercise in the maintenance of optimal health and rehabilitation can be traced back to ancient cultures. As early as the ninth century B.C., the ancient Indian system of medicine (Ayurveda) recommended exercise and massage for the treatment of rheumatism and the Greek philosopher Hippocrates ('the father of medicine') acknowledged the virtues of exercise for physical and mental health in the 4th century B.C.⁽⁶⁾. In more recent times, a body of epidemiologic research has demonstrated inverse associations of varying strength between habitual exercise and the risk of several

chronic diseases, including coronary heart disease, hypertension, Type 2 diabetes mellitus, osteoporosis, obesity, anxiety and depression⁽⁷⁻⁹⁾. Additionally, a growing body of research during the last 20 years has provided 'convincing' evidence of an inverse association between physical activity and risk of colon cancer⁽¹⁰⁾. There is also evidence of a 'probable' inverse association between physical activity and risk of other cancers, including post-menopausal breast and endometrial cancer and limited 'suggestive' evidence of a similar association between physical activity and lung, pancreatic and pre-menopausal breast cancer⁽¹⁰⁾.

There is evidence that regular exercise is associated with physical and psychosocial health benefits in many chronic disease conditions⁽¹¹⁾ and hence, keeping fit and healthy is now promoted by Government health departments as an essential element of self-care for boosting general wellbeing, improving mobility and easing of symptoms.

Health Benefits of Yoga

The relative health benefits of yoga in relation to disease risk and its role in the management of chronic diseases is less clearly established. The heart rate response to typical yoga sessions in healthy adults at normal ambient temperatures has been shown to be equivalent to low intensity walking exercise in some studies^(12,13). However, other studies have provided conflicting evidence for healthy adults, with higher levels of cardiopulmonary stress being recorded during yoga sessions⁽¹⁴⁾. A number of single group (uncontrolled) studies have reported improvements in maximum oxygen capacity⁽¹⁵⁾ and blood cholesterol profile⁽¹⁵⁾. While some studies have found no improvement in cardiopulmonary variables after programmes of yoga practice (e.g. Blumenthal and others⁽²²⁾), the actual level of physical exertion experienced during a session, and thus the stimulus for cardio metabolic adaptations, is likely to be strongly influenced by the type of yoga, the level of experience of the practitioner and the ambient temperature during the session. Yoga practice also involves a spiritual dimension and specific breathing exercises, not common to conventional forms of exercise, which may evoke other health benefits.

Materials and Methods

Most recent literature based on the effect of yoga and meditation on human health, particularly on psychological disorders (e.g., mental stress, anxiety, etc.), endocrine disorders (e.g., thyroidism, gigantism, etc.), metabolic disorders (e.g., diabetes, hyperlipidemia, cancers, etc.) and neurological disorders (e.g., Alzheimer's disease, etc.) was thoroughly reviewed.

Role of Yoga in maintaining the Physical Health

Yoga plays a greater role in the management of physical - mental health (Chen, K.-M. et. al.2010). Yogic Intervention has been shown a significant effect on General Well Being; (Kumar K 2012). Yoga might play role as a safety measure. Other study also performed in Toronto, Canada, clearly states that physically active individuals are less likely to develop hypertension than sedentary individuals (Shephard RJ. 2001). Pokhariyal K P & Kumar K (2013) reported in their study that there is a significant effect of Hatha Yogic Practices on Body weight of the Human subjects. Study conducted on patients with angina and coronary risk factors have showed a positive response in lipid profile after 4-14 weeks of yogic practices. A study

held in Ontario, Canada also corroborate with our study and state that training increases HDL cholesterol and several studies have confirm this belief (Katzmarzyk PT 2001). Kumar K (2013) reported in his study that practice of Yoga cleansing (Shatkarma) lower down the serum glucose and serum cholesterol level of the Human subjects. In another study it has been seen that there is an Effect of Yogic Intervention on General Body weight of the subjects (Kumar Kamakhya 2015). On several parameters of general health factors practice of Yoga shows a positive impact towards Physical Health.

Yoga is helpful in managing Common Disorder

Diabetes, Hypertension, Obesity and joints related problems are very common now days. Kumar K (2012) there is a significant effect of Yogic intervention on serum glucose level on Diabetics. I Haslock, et al. (1994) find that people with rheumatoid arthritis who participated in a yoga program over a three-month period had greater handgrip strength compared with those who did not practice yoga. Negi A & Kumar K; observed in their study that there is a significant effect of Yogic Intervention on R A Factor in Gout Patients. It was observed that yoga practice has also significantly improved BP among people with hypertension (Blumenthal JA 1989). In another study it has been observed that there is a significant effect of Yogic intervention on Blood uric acid Level in Gout Patients (K Kumar 2013).

Yoga improves cardio-respiratory efficiency

Joshi et al (1992) have demonstrated that six weeks of pranayam breathing course resulted in improved ventilatory functions in the form of lowered respiratory rate, and increases in the forced vital capacity, forced expiratory volume, maximum voluntary ventilation, and prolongation of breath holding time. Similar beneficial effects were observed by Makwana et al (1988) after 10 weeks of yoga practice. Madanmohan et al (2008) have reported that yoga training of six weeks duration attenuates the sweating response to step test and produces a marked increase in respiratory pressures and endurance in 40 mm Hg test in both male and female subjects. In another study, they reported that 12 weeks of yoga practice results in significant increase in maximum expiratory pressure, maximum inspiratory pressure, breath holding time after expiration, breath holding time after inspiration, and hand grip strength (Madanmohan, 1992). Kumar K (2013) shows in his study that there is a Significance of Nadi Sodhan and Kapalbhathi on forced ventilation capacity (FVC), maximum voluntary ventilation (MVV) and picks expiratory flow rate (PEFR). Greater lung volume decreases the frequency and amplitude of involuntary contractions of respiratory muscles, thereby lessening the discomfort of breath holding.

Conclusion

The public interest towards yoga and meditation is increasing day by day due to their beneficial effects in mental and physical health. Since the ancient time, yoga has been used as a holistic relaxation practice which is effective against hypertension, obesity, anxiety, insomnia and aging The weight of available evidence suggests that yoga practice is safe and can bring many health benefits to practitioners, whether they are young, old, healthy, recovering from illness or looking for a therapeutic option to help them to manage a chronic condition.

The linkage between the mind and body, particularly in reference to Yogic sciences, was widely accepted in the ancient wisdom and oriental learning, but later developed an artificial dichotomy between these two components. Modern medical science focuses, only on body as something which is apart from the mind. However psychosomatic linkages have now got its due importance by both modern medicine practitioners and therapists of Indian tradition. It has now been proverb by scientific researches beyond doubt that yoga practices brings in better balance equilibrium in the autonomic function and metabolic rate at one hand and neurohumoral functions at the other hand, so that the state of both physical and mental well-being is achieved. This itself reflects that physiological and psychological conditionings go hand-in – hand and operate simultaneously.

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