

Need of Yoga for Spiritual Evolution

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ABSTRACT

Yoga was intended for spiritual evolution, but increasingly nowadays it is used for its incidental benefits such as stress reduction and managing lifestyle related disorders. Despite its Indian origin, the number of yoga practitioners in Western society is growing. Healthy older persons who practiced yoga had improved sleep, better gait and balance, and less chance of depression, compared to those who did not practice yoga. In mentally challenged persons yoga showed better motor coordination, general mental ability, social adjustment and improved central neural processing ability. Another application of yoga which has been studied is posttraumatic stress disorder for survivors of natural disasters, with studies cited about benefits observed in survivors of a tsunami and a flood. Apart from this, yoga therapy resulted in improved perceived quality of life in physical and psychological domains as well as improved postural stability in patients with schizophrenia. The evidence showed that yoga plays an important role to overcome drug addiction at both pre and post clinical stages and it helps individuals to decrease drug dependency and other associated problems. More recent studies have made it apparent that there is no evidence that yoga is beneficial for persons who are HIV positive or those with AIDS. Hence it is apparent that there are several diverse applications of yoga in rehabilitation.

Keywords: Yoga, Rehabilitation, Psychological aspects

I. INTRODUCTION

Yoga is a group of physical, mental, and spiritual practices or disciplines which originated in ancient India. There is a broad variety of yoga schools, practices, and goals in Hinduism, Buddhism, and Jainism. Among the most well-known types of yoga are Hatha yoga and Raja yoga. The origins of yoga have been speculated to date back to pre-Vedic Indian traditions; it is mentioned in the Rigveda, but most likely developed around the sixth and fifth centuries BCE, in ancient India's ascetic and śramaṇa movements. The chronology of earliest texts describing yoga-practices is unclear, varyingly credited to Hindu Upanishads. The Yoga Sutras of Patanjali date from the first half of the 1st millennium CE, but only gained prominence in the West in the 20th century. Hatha yoga texts emerged around the 11th century with origins in tantra. Yoga gurus from India later introduced yoga to the West, following the success of Swami Vivekananda in the late 19th and early 20th century. In the 1980s, yoga became popular as a system of physical exercise across the Western world. Yoga in Indian traditions, however, is more than physical exercise; it has a meditative and spiritual core. One of the six major orthodox schools of Hinduism is also called Yoga, which has its own epistemology and metaphysics, and is closely related to Hindu Samkhya philosophy. Yoga has been studied and may be recommended to promote relaxation, reduce stress and improve some medical conditions such as premenstrual syndrome. Yoga is considered to be a low-impact activity that can provide the same benefits as "any well-designed exercise program, increasing general health and stamina, reducing stress, and improving those conditions brought about by sedentary lifestyles". It is particularly promoted as a physical therapy routine, and as a regimen to strengthen and balance all parts of the body. Yoga may improve psychological health during cancer treatment, although more evidence is needed to confirm this possible benefit. Other research indicated that yoga could be a useful in addition to other treatments in schizophrenia, and may have positive effects on mental health, although the quality of research to define these effects is low. In 2015 the Australian Government's Department of Health published the results of a review of alternative therapies that sought to determine if any were suitable for being covered by health insurance. Yoga was one of 17 practices evaluated for which no clear evidence of effectiveness was found. Accordingly In 2017 the Australian government named yoga as a practice that would not qualify for insurance subsidy, saying this step would "ensure taxpayer funds are expended appropriately and not directed to therapies lacking evidence"



Yoga is an ancient Indian science and way of life, which influences the functioning of the brain and the rest of the body. Several studies have shown that the practice of yoga has a definite role in the promotion of positive health, including mental health, characterized by improved cardio-respiratory efficiency, autonomic responses to stressors, sleep, muscular endurance, and 'higher' brain functions. The practice of yoga has been used in rehabilitation. A one-year controlled trial showed that yoga practice improved the functioning of mentally challenged children, in three aspects, viz., their motor coordination, social interactions, and IQ. Also, the practice of yoga reduces psycho-physiological signs of stress (e.g., rapid, irregular respiration) in children with impaired vision and in adolescent girls under legal custody at a State remand home. There were also improvements in chronic schizophrenics practicing yoga, in terms of better bodily awareness and flexibility of thinking. Finally practicing yoga was found to promote positive physical and mental health in persons over the age of sixty, those staying in a community home and in persons with work related stress.

International Yoga Day

On 11 December 2014, the United Nations General Assembly approved a resolution establishing 21 June as "International Day of Yoga", following the call for its adoption by Indian Prime Minister Narendra Modi during his address to UN General Assembly on 27 September 2014. In suggesting one of the two solstices, Modi noted that it is the longest day of the year in the Northern Hemisphere and that it has special significance in many parts of the world. The first International Day of Yoga was observed worldwide on 21 June 2015. About 35,000 people, including Modi and many dignitaries, performed 21 yoga asanas for 35 minutes at Rajpath in New Delhi. The day devoted to yoga was observed by millions across the world. The event at Rajpath established two Guinness records – largest Yoga Class with 35,985 people and the record for the most nationalities participating in it.

Rehabilitation

The word rehabilitation is derived from Latin (rehabilitare) and means 'to make fit again'. Yoga has been used to help restore function, health and dignity to groups with special needs. Apart from this, yoga has several applications in rehabilitation. Yoga practice can also play an important role in the rehabilitation of physically and mentally handicapped persons, as well as those who are socially disadvantaged. The present article is limited to yoga in psychological rehabilitations. The studies related to complex medical conditions such as dementia, oncological conditions were left out in this article as they are beyond the scope of this report. It is a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments". A distinction is sometimes made between habilitation, which aims to help those who acquire disabilities congenitally or early in life to develop maximal functioning; and rehabilitation, where those who have experienced a loss in function are assisted to regain maximal functioning. In this chapter the term "rehabilitation" covers both types of intervention. Although the concept of rehabilitation is broad, not everything to do with disability can be included in the term. Rehabilitation targets improvements in individual functioning – say, by improving a person's ability to eat and drink independently. Rehabilitation also includes making changes to the individual's environment – for example, by installing a toilet handrail. But barrier removal initiatives at societal level, such as fitting a ramp to a public building, are not considered rehabilitation in this Report. Rehabilitation reduces the impact of a broad range of health conditions. Typically rehabilitation occurs for a specific period of time, but can involve single or multiple interventions delivered by an individual or a team of rehabilitation workers, and can be needed from the acute or initial phase immediately following recognition of a health condition through to post-acute and maintenance phases. Rehabilitation involves identification of a person's problems and

needs, relating the problems to relevant factors of the person and the environment, defining rehabilitation goals, planning and implementing the measures, and assessing the effects. Educating people with disabilities is essential for developing knowledge and skills for self-help, care, management, and decision-making. People with disabilities and their families experience better health and functioning when they are partners in rehabilitation.



Psychological aspects of aging

The number of healthy older people is increasing. As many of these individuals do not have any diagnosed illness they are neglected by clinicians even though they do have complaints assumed to be a part of normal aging. A three-arm randomized controlled trial (where the three arms were yoga, ayurveda and wait list control), assessed the self-rated sleep in sixty-nine older adults randomized as the three groups. The yoga group showed a significant decrease in the time taken to fall asleep, an increase in the total number of hours slept, and in the feeling of being rested in the morning. These benefits were observed after six months of yoga practice. The same group also showed an improvement in gait and balance after six months of yoga practice. This is especially important as falls are associated with a high incidence of morbidity and even fatalities in older persons. Another benefit seen in the same groups when they practiced yoga for six months was a decrease in negative affect or depression, based on the Geriatric Depression Scale.

HIV Positive and Aids Patients

A pilot study conducted on HIV positive persons, 19 showed that the practice of Transcendental Meditation improved the health status and general well being while the immune status did not change. The practice of meditation and other yoga techniques may help in improving the psychological status of HIV positive persons.

Mentally challenged persons

A rigorous trial was conducted in 1989. There were ninety children with mild to severe mental retardation. The study assessed the effects of yoga versus non yoga in a control group over one year. Yoga practice included postures (asanas), breathing practices (pranayamas) and meditation. The yoga group showed better motor co-ordination, general mental ability, and social adjustment, compared to the group who did not practice yoga. In another study on thirty-four mentally challenged adolescents, a significant decrease in visual and auditory reaction time was found following mukha bhastrika (a bellows type of pranayama). A decrease in reaction time signifies improved central neural processing ability.

Post-traumatic stress disorder (PTSD)

Following exposure to trauma people often develop high levels of fear and anxiety, and eventually a collection of symptoms called post-traumatic stress disorder (PTSD). The trauma could be exposure to violence (e.g., being a victim of a terrorist attack, a hijacking, an assault, and so on), as well as natural disasters, such as earthquakes. A week of yoga practice was useful to reduce self-rated fear, anxiety, sadness and disturbed sleep in survivors of the Indian Ocean tsunami which

occurred in 2004. The people were residents of the Andaman Islands, an archipelago in the Bay of Bengal. Apart from the self-rated reduced symptoms of distress, following yoga the survivors had lower heart and breath rates, suggesting a decrease in their stress levels. While the tsunami was an unexpected natural disaster which had devastating effects, in many parts of the world natural disasters such as floods, cyclones and drought occur repeatedly. Yoga was also found to be helpful and possibly prevent development of post-traumatic stress disorders in survivors of floods which occurred in the north Indian state of Bihar. This flood recurs year after year. The group who practiced yoga had reduced sadness, which is of importance as with recurring traumas people may develop depression. The non-yoga (control) group had increased anxiety. Since this did not happen in the yoga group, yoga practice may have prevented anxiety from increasing.

Visually handicapped subjects

Persons with impaired vision understandably often have higher levels of anxiety than those with normal vision. It has been shown that blind children learn yoga asanas with great ease. In a controlled study, it was shown that following three weeks of yoga practice (asanas and breathing practices), blind children had a significant decrease in breath rate and their abnormally irregular breathing became regular (reduced physiological signs of stress). There is also another possible area where the practice of yoga may benefit the blind. The blind are known to have a significantly better developed tactile sense than subjects with normal vision. Unfortunately this does not apply to their performance of motor skills,¹⁰ which are increasingly required today, for example to use the specially designed computer keyboards. Yoga practices help in the development of motor skills in persons with normal vision, ¹¹ so a similar effect may be obtained in the blind. This is currently under investigation.

Substance abuse

Substance abuse, including the use of tobacco, alcohol and mental-state modifying drugs, has several medical and social consequences. Also, rehabilitation of people with addictions like these is very difficult to achieve. Yoga plays an important role to overcome drug addiction at both pre and post clinical stages and it helps individuals to decrease drug dependency and other associated problems. Some of the studies described here in three categories are as:

Yoga and tobacco addiction A rhythmic yoga breathing (Sundarshan Kriya Yoga) decreased use of tobacco in twenty-one percent of individuals after six months of practice. Tobacco smoking is the leading preventable cause of death among women in America.

Yoga and alcohol dependency Alcoholism is a common cause of medical, social and economic problems. A report found that three months of yoga practice, which included postures, breathing practices and meditation brought about significant psychological and biochemical changes in chronic alcoholics. In a two-week study on sixty alcohol dependent individuals, participants were equally randomized as two groups, one group received Sudarshan Kriya Yoga (SKY) the other was a control group. The level of depression, morning plasma cortisol, ACTH and prolactin were measured before and at the end of two week. A significant reduction in depression scores and stress hormone level (plasma cortisol and ACTH) was found in the SKY group that indicates the beneficial effects of Sudarshan Kriya Yoga.

Yoga and other substance abuse Following a ninety day residential Kundalini yoga lifestyle program in a pilot study, participants having substance abuse showed improvements on a number of psychological self-report questionnaires. In a randomized controlled trial, seventy five Chinese women (having ages ranged between twenty and thirty seven years) undergoing heroin detoxification were randomly allocated to an intervention and a control group. Most of them had used heroin by injection. The intervention group received a 6-month yoga intervention with hospital routine care, and the control group received hospital routine care alone. Mood status and quality of life were assessed at baseline and following 3 and 6 months of treatment. The intervention group showed a significant improvement in mood status and quality of life over time compared with the women in the control group.

Work related stress

The effect of yoga on occupational stress was studied. In the first study, 26 asymptomatic, male, middle managers were evaluated for the physiological changes of a yoga based stress management program. At the end of the program there was a significant reduction in the breath rate. There was also a decrease in breath rate, peak power of low frequency component of heart rate variability, ratio between low frequency and high frequency and an increase in the high frequency peak power in the subjects whose 'occupational stress index' was greater than the median. These results suggest that following yoga based stress management program subjects with higher levels of occupational stress who do not necessarily show raised sympathetic arousal at baseline, show significant reduction in sympathetic activity. The second study was on normal volunteers studied in two sessions of yoga based guided relaxation and supine rest. 15 subjects were assessed for autonomic variables and 25 subjects were analyzed using oxygen consumption and breathe volume. A significant decrease in oxygen

consumption and increase in breath volume were recorded after guided relaxation. There were comparable reductions in heart rate and skin conductance during both guided relaxation and supine rest. During guided relaxation there was a reduction in low frequency component, ratio between the low and high frequency and increase in the power of the high frequency component of the heart rate variability spectrum. The above results suggest that sympathetic activity decreased after guided relaxation based on yoga.

Summary

The use of yoga for rehabilitation has diverse applications. Yoga practice benefited mentally handicapped subjects by improving their mental ability, also the motor coordination and social skills. Physically handicapped subjects had a restoration of some degree of functional ability after practicing yoga. Visually impaired children showed a significant decrease in their abnormal anxiety levels when they practiced yoga for three weeks, while a program of physical activity had no such effect. Socially disadvantaged adults (prisoners in a jail) and children in a remand home showed significant improvement in sleep, appetite and general well being, as well as a decrease in physiological arousal. The practice of meditation was reported to decrease the degree of substance (marijuana) abuse, by strengthening in them the mental resolve and decreasing the anxiety. Another important area is the application of yoga (and indeed, lifestyle change), in the rehabilitation of patients with coronary artery disease. Finally, the possible role of yoga in improving the mental state and general well being of HIV positive persons and patients with AIDS, is being explored.

CONCLUSIONS AND LIMITATIONS

Yoga practice has several applications in rehabilitation. The priority is to ensure access to appropriate, timely, affordable, and high-quality rehabilitation interventions, consistent with the CRPD, for all those who need them. In middle-income and high-income countries with established rehabilitation services, the focus should be on improving efficiency and effectiveness, by expanding the coverage and improving the relevance, quality, and affordability of services. In lower-income countries the focus should be on introducing and gradually expanding rehabilitation services, prioritizing cost-effective approaches. A broad range of stakeholders have roles to play:

- a) Governments should develop, implement, and monitor policies, regulatory mechanisms, and standards for rehabilitation services, as well as promoting equal access to those services.
- b) Service providers should provide the highest quality of rehabilitation services.
- c) Other stakeholders (users, professional organizations etc.) should increase awareness, participate in policy development, and monitor implementation.
- d) International cooperation can help share good and promising practices and provide technical assistance to countries that are introducing and expanding rehabilitation services

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