

YOGA AS AN ANCILLARY PREVENTIVE THERAPY IN MANAGING CARDIOVASCULAR DISEASE- A REVIEW

Lakshmipriya S^{1*}, Tharshanodayan NJQ², Jeevanandhini R³

^{1&2} PG scholar, Department of *Gunapadam*, Govt. Siddha medical college (The Tamilnadu Dr. M.G.R. medical university, Chennai, Tamilnadu, India), Palayamkottai, Tirunelveli.

³ PG scholar, Department of *Nanju noolum maruthuva neethinoolum*, Govt. Siddha medical college (The Tamilnadu Dr. M.G.R. medical university, Chennai, Tamilnadu, India), Palayamkottai, Tirunelveli.

*Corresponding author email id: drlakshmipriya93@gmail.com

ABSTRACT

Siddha, the traditional system of medicine is widely practiced in south India. In this system, our forefather's implemented much special therapies to enhance the health of an individual in respect to diet, yoga etc. Yoga is regarded as a type of physical activities as well as a stress management strategy which dealt with mental concentration and later it also implies to control senses and thoughts with an extensive knowledge. With the turn of the century cardio vascular diseases have now become the leading cause of mortality in India due to day to day correctable life style modification such as physical inactivity, unhealthy diet (diet with high fat combined carbohydrate), being overweight, etc., Several studies shown that yoga can control causative risk factors for cardio vascular disease like hypertension, type II diabetes mellitus, obesity, smoking, palpitation induced by thyroid disorders and psychosocial stress. Even though in our Siddha literature, Siddhar *Thirumoolar* elaborately expound the role of yoga in the form of meditation as a secondary therapy in order to managing Cardio vascular disease by relieving stress, palpitation and also suggest in reducing blood pressure. Also some of the older studies revealed that meditation may be extremely useful in secondary prevention of managing cardio vascular disease in extend. Generally while practicing yoga meditation for stress induced disorders, the result would be renewal and stabilization of nerve cells, relieving of tension, mental, muscular or nervous and attaining of complete physical and mental relaxation. However it is found to be an initiatory

innovative way to deliver this effective meditation therapy in reducing stress induced cardiovascular disease among the whole population as per Siddha literature.

KEYWORDS: Siddha, *Thirumoolar*, yoga, stress, cardiovascular disease, hypertension.

INTRODUCTION

The Siddha system of medicine is one of the most widely practiced prevailing traditional system in southern part of India. The unique nature of this system is to place equal emphasis on body, mind and spirit of the individual. In this system, our forefather's implemented much special therapies to enhance the health of an individual in respect to diet, yoga etc., in managing correctable life style modifications. Yoga is called to be the silencing of the mental activities which leads to the complete realization of the intrinsic nature of the supreme person and it stands too dealt with mental concentration and later it also implies to control all senses and thoughts with an extensive knowledge. With the turn of the century cardiovascular diseases have now become the leading cause of mortality in India due to day to day correctable life style modification such as physical inactivity, unhealthy diet (diet with high fat combined carbohydrate), being overweight, etc., The most common cause for cardiovascular disease in related to stress are hypertension, Type II diabetes mellitus, obesity, smoking, palpitation induced by thyroid disorders and psychosocial stress. Thus stress is considered to be the most influencing factor among the cardiovascular disease and also some of the older studies revealed that paying attention in breathing (i.e. meditation) is the quite method of therapy to ease from mental distress and anxiety. Meditation accounts to be a crucial part of yoga as less strenuous among the others which involves physical movements as muscle stretching etc. On overall proceedings, meditation holds the place in lowering the effect of cardiovascular disease and improving the quality of life. Finally the authors nearing the best for cardiovascular disease in Siddha system of medicine, as an outcome meditation becomes the most successive therapy to get rid anxiety and mental distress which is often thought to be an aggressive factor in enhancing cardiovascular associative disorders.

IMPORTANCE OF YOGA IN SIDDHA

Siddha is one of the oldest and ever practicing systems of medicine which deals with physical, psychological, social and Spiritual well-being of an individual. Yoga is considered to be the part of siddha system of medicine. Apart from medication, Karpam and Yoga plays a vital role in enhancing individual's health. Here yoga, which means to attain the spiritual peace and also in reducing stress among the stress induced surroundings. Nowadays stress is

the common causative factor for all health illness which was range from mild to severe (i.e.) headache up to cardio vascular disease. Generally, Siddha yoga strives to achieve perfection in all human activities and certain yogasanas described in our literature plays a significant role in strengthening internal organs. Also pranayama, a part of Yoga is considered to be an expansion of individual's vital energy said by Ramamurthimishra. In Siddha, PatanjaliSiddhar chiefly accounts Ashtanga Yogam as a crucial part in managing health and mind related activities to enhance the entire power of the body and the stages of AshtangaYogam are of following:

1. Yama - Restraints, Moral disciplines.
2. Niyama - Positive observances
3. Asana - Posture
4. Pranayama - Breathing techniques
5. Pratyahara - Sense withdrawal
6. Dharana - Focused concentration
7. Dhyana - Meditative absorption
8. Samadhi - Eternal bliss.

CARDIOVASCULAR DISEASE – A WIDE VIEW

Cardiovascular disease is one of the leading cause of death among the population. Across worldwide cardiovascular disease causes one – third of deaths than the others. Nowadays, people in their 20's are falling prey to heart diseases. The fact to note that the life style of well-being has modified a lot from our ancestors to date young ones. According to a new Heart and Stroke foundation report, the face of heart disease is quickly transforming but the medical community has made huge strides in understanding cardiovascular health. In 2015, there were more than 400 million individuals living with cardio vascular disease and 18 million deaths worldwide. Among those causative factors, hypertension is considered to be most predominant factor and also to known that Hypertensive heart disease is a significant problem in India among other cardiovascular diseases, with an increase of 138% in comparison with the number of deaths occurred in 1990. Some of the older studies revealed that yoga in the form of meditation plays vital role in the reduction of blood pressure and stress. Thus here yoga in the form of meditation is known to be secondary prevention in managing cardiovascular diseases.

YOGA IN MANAGING CARDIOVASCULAR DISEASE

Generally yoga is advised to carry out a healthy functioning of the body such as in maintaining good posture, weight, energy, blood circulation, lungs expansion, heart strengthening, etc., Yoga aids a dual beneficial role as a preventive therapy and also supportive treatment therapy in case of cardio vascular diseases. Few of the yoga asana which are to be following to maintain a healthy heart as a preventive therapy are as follows:

- Tadasana(Mountain pose)
- Vrikshasana(Tree pose)
- Utthitahastapadasana(Extended hand and feet pose)
- Trikonasana(Triangle pose)
- Veerabhadrasana(Warrior pose)
- Bhujangasana(Cobra pose)
- Dhanurasana(Bow pose)
- Salambasarvangasana(Half shoulder stand pose)
- Shavasana(Corpse pose),etc.,

On the other hand, according to our literature, yoga is termed to be in controlling all sense of an individual and perceiving the eternal peace with thoughts been hidden. It tends to strengthen the vital organs in order to maintain metabolic activity of an individual.

As such our SiddharThirumoolar elaborately expound the role of yoga in the form of meditation as a secondary therapy in order to manage cardiovascular disease by relieving stress palpitation and also suggest in reducing blood pressure. Our literature describes the yoga in the form of meditation which was said by SiddharThirumoolar is given below:

Nāṭṭamiraṇṭunaṭumūkkil

vāṭṭamumillaimaṇaikkumaḷivillai

yōṭṭamu millaiyuṇarvillaitāṇillai

tēṭṭamumillaicivaṇavaṇāmē.

nayaṇamiraṇṭunācimēlvaittiṭ

ṭuyarvilāvāyuvaiyuḷḷēyaṭakkitt

tuyaraṇāṇāṭiyētūṅkavallārkkup

payāṇitukāyampayamillaitāṇē. –Tirumūlar

The explanation for his above sayings is that, have to concentrate both eyes and mind towards the tip of nose for few minutes. Thus, as result the individual feels sleepy with unknown sense of lethargy, palpitation, stress and it also boosts up the immune system of the individual in person. Alsohe mentioned the quite way to overcome the stress factors such as the restlessness, indisposition and palpitation which accounts an extensive part in cardiovascular disease.

STEPPING INTO RESEARCH

On scientific view of yoga therapy role in managing cardiovascular disease is found to be nerve stimulation (Vagus nerve), stress reactivity and musculoskeletal systems especially hormonal system. Mind depression and stress leads to decreased parasympathetic activity and increased sympathetic activity which in turn results in autonomic system imbalance, vascular damages and myocardial damages and finally these leads to cardio vascular diseases. As such autonomic nervous system constitute the mind-body (heart) interaction is consider to the fundamental link. In fact, mindfulness also called to be meditation is considered to be the greatest impact on yoga therapy among the others. Also recent studies holds the fact that mindfulness exists as emerging therapeutic benefits within adults who are suffered a lot in finding a way to get rid from mental distress and anxiety. And finally meditation is thought to be well-versed therapeutic remedy to overcome all those stress related disorders as revealed.

DISCUSSION

Basically, Yoga is the art of relaxing in different postures while focusing on breathing most effective when dealt with stress and also by virtue of its concept and philosophy it relieves stress. Under conditions of stress, adrenaline is released from adrenal medulla into the circulation where by, it increases the rate and force of cardiac contraction, thus there is a strong theoretical support offer the role of stress, treats hypertension and many problems related with hypertension. Recent medical research established that the chronic stress leads to the lowering of the body's immunological processes which are its main defense. But in prior to this research, our literature evidenced the fact that stress tends to lowering the body's immunological system and metabolic activity. Some of the older studies suggest that meditation may be extremely useful in secondary prevention in managing cardio vascular disease and may reduce the events by 48% over a period of 5 years.

CONCLUSION

Thus, we concluded that yoga plays a role on health related quality of life and the above from of meditation mentioned by Thirumoolar tends to be in place of stress relieving and considered to be the ancillary prevention in managing stress induced cardio vascular disease. Generally while practicing yoga meditation for stress induced disorders, the result would be renewal and stabilization of nerve cells, relieving of tension relating mental, muscular or nervous and attaining of complete physical and mental relaxation. Here, according to our literature, the above said results would be attained while practicing the Thirumoolar's meditation. At the end, yoga meditation contributes a favorable tool for cardiac rehabilitation. However it is found to be an initiatory innovative way to deliver this effective meditation therapy in reducing stress induced cardio vascular disease among the whole population.

REFERENCES

1. Yoga ratna Dr. H.Kumarkaul.Encyclopedia of Yoga for common diseases.Vol.1 2015:11-93.
2. Kuppucāमितुतलियār. Potumaruttuvam. 2012:268
3. Tiyākarājan. Siṛappu maruttuvam.2008:31.
4. Emani S, Binkley PF. Mind-body medicine in chronic heart failure: a translational science challenge 2010 Nov; 3(6):715-25.
5. Paula R Pullen, William S Seffens, and Walter R Thompson. Yoga for heart failure: a review and future research 2018 Aug; 11(2):91-98.
6. Chu P, Gotink RA, Yeh GY, Goldie SJ, Hunink MG. The effectiveness of yoga in modifying risk factors for cardiovascular disease and metabolic syndrome: A systemic review and meta-analysis of randomized control trials.2016 Feb; 23(3):291-307.
7. Manchandra SC, Madan K. Yoga and meditation in cardiovascular disease.2014 Sep; 103(9):675-80.
8. Robert H Schneider et.al. Stress reduction in the secondary prevention of cardiovascular diseases. 2012 Nov; 5(6):750-8.
9. Prabhakaran D et.al, Cardiovascular diseases in India: Current epidemiology and future directions. 2016 Apr 19; 133(16):1605-20.

10. Manchanda SC. Yoga a promising technique to control cardiovascular disease. 2014; 66(5):487-489.

Note: All the ethnic terms are transliterated to English by using ISO - 15919 transliteration scheme.