

## A LITERATURE REVIEW ON *PRANAYAMA* FOR OBTAINING PHYSICAL, MENTAL AND SPIRITUAL HEALTH

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### ABSTRACT

Yoga being originated before thousands of years in India, it has created a great impact in prevention and management of diseases. *Pranayama*, a beneficial yoga practice is helpful in maintaining physical and mental health to mankind. *Pranayama* is a conscious prolongation of inhalation, retention and exhalation. With constant practice of *Pranayama*, one can be free from the chronic disease and slows the aging process. It reduces stress and anxiety and improves the autonomic functions by initiating neuro-hormonal mechanisms by reducing sympathetic activity. It provides a source of eternal peace and freedom and also the pain management for specific illness. In this paper, we have dealt with the aspects of *Pranayama* and its usage for convalescent activities on health. This paper provides information in practicing *Pranayama* and gaining its benefits to the fullest.

**KEYWORDS:** Yoga, *Pranayama*, Chronic Disease, Stress, Anxiety.

### INTRODUCTION

For centuries millions throughout the world have used the system and disciplines of Yoga to attain physical and mental youthfulness find improved health; and discover a new and thrilling awareness of themselves and the Universal consciousness. This is obvious from the siddha text *Thirumoolar "Thirumanthiram"* which describes both aspects of preventive

and curative yogic postures. In Tamil “Yoga” means “Integration”, union of the ‘mystical union’ with the Godhead, the spiritual union with the *Aatmaa*, the reality.

“*Pranayama*” is also one of the “*Kayakarpam*” (Rejuvenation) methods that preserve physical, mental, intellectual, sexual, spiritual and cosmic energy by preventing the approach of grey hair, wrinkling, disease and death.

*SiddharThirumoolar* details the *Ashtangayogam*, i.e. the eight stages of yoga in his work “*Thirumanthiram*”. Among them, through *Pranayama*, it helps to awaken the *kundalini*, the serpent power (female energy) of the mother Goddess, in the form of snake, coiled in three and a half turns, waiting to wake up at the root chakra to reach and unite with the ultimate male energy at the-crown.

## **ASHTANGA YOGAM**

As said by *Siddhar Thirumoolar* in his “*Thirumanthiram*”. There are eight stages of yoga to realize the true entity of eternal bliss.

“*Ashtangayogam*” is also called as “*Agathavamettu*”. They are

- *Iyamam*
- *Niyamam*
- *Asanam*
- *Pranayamam*
- *Pratyaharam*
- *Dharanai*
- *Dhyanam*
- *Samathi*

### **IYAMAM (Principles of moral code)**

It means “Learning Discipline”. It is an internal practice of controlling mind and mind waves. By regular exercise and controlling the mind, impurities which get distracted by five senses leading to sensuality can be removed.

### **NIYAMAM (Personal Disciplines)**

“*Niyamam*” means “Purity of action”. It observes rules to obtain that aim. This is the second stage of yoga. Learning the principles of *niyamam* and living accordingly to them by providing useful and harmless is the achievement of success.

## **ASANAM (Yoga Posture)**

*Asanam* means the posture or pose. It is also called *yogasanam*. The practice of *yogasanam* becomes a *Kayakarpam*, lengthens one's youth, lifetime and maintains the beauty. It drives away laziness and increases the energy level. It improves memory and knowledge. It helps to control the senses and increases the concentration power of mind. *Asanas* are countless. It can be learnt and practice daily. Some of the *asanas* are *Padmasanam*, *Bhadrasanam*, *Baddhakonasanam*, *Komugasanam*, *Singaathanam*, *Sotherasanam*, *Siddhasanam*, *Veerasanam*, *Sugaathanam*, and *Swathikasanam*. These are called *Sugaasanam*.

## **PRANAYAMAM (Yogic Breathing)**

(*Prana*-Breath, *Ayama*-Control)

The perfect and scientific art of controlling one's breathing is called *Pranayama*. It is also called as "*vasi*" or "*vasiyogam*". By controlling the motion of the lungs or respiratory organs, we can control the *prana* that is vibrating inside. By the control of *prana*, the mind can be easily controlled, because the mind is fastened to the *prana*, like the bird to the string. It is used in the treatment of diseases of lung, respiratory, skin and nervous system also includes the brain, etc. It helps in increasing the memory and mental concentration.

## **PRATYAHARAM (Withdrawal of Senses)**

The practice of controlling and withdrawing the senses is known as *pratyaharam*. It quietens the senses and draw them inwards, leading the aspirants to the divine.

## **DHARANAI (Concentration on object)**

*Dharanai* is the method of fixation of consciousness on parts of anatomy or outside of body. By exercising, it controls our five senses and increases the power of concentration.

## **DHYANAM (Meditation)**

It is the perfect exercise to get complete control over the mind. The uninterrupted flow of the mind towards the object is chosen for meditation. It then merges to *samathi*.

## **SAMATHI (Salvation)**

(*Samam* + *aathi*) which mean attaining the state equal to god. It is also called thoughtless self-meditation. It is the state of union between *jeevatma* and *paramatma*.

Realizing the *brahma* (pure consciousness) or Realization of God is the ultimate achievement of Human Birth.

## **PRANAYAMAM IN SIDDHA LITERATURE**

*Pranayama* means the prolongation of breath and its restrain. It is an art and has techniques to make the respiratory organs to move and expand intentionally, rhythmically and intensively. It is also called as the soul of yogic science. According to siddha literature, other names for *Pranayama* are *vasiyogam*, *sarapazhakkam*, *vayutharanai*, *moochupayirchie*, *uyirkaal*, *swasapanthanam*, *swasapayirchi* and *pranavayu*.

*SiddharThirumoolar* said,

“*Valiyinai vaangi vayathil adakil*

*Palingothu kaayam palukinum pinjaan*

*Thaeliya guruvin thiruvarul petraal*

*Valiyinum vaettu valiyanu mamae”*

(*Thirumanthiram* 569)

The poem reveals that if you controlling *prana* within the body, however old your body, it turns into young and crystal hard. The *prana* is the sum total of all energy that is manifest in the universe. One who succeed in doing *Pranayama* and controlled the flow of vital energy in the *nadis* get their body rejuvenates from preventing the approach of grey hair, wrinkling, disease and death.

The information about the *Pranayama* is mentioned in texts like *Thirumoolar Thirumanthiram*, *Thirumoolar Njanam*, *Njana chaaranool*, *Avvai Kural*, *Thiruvalluvar Njanam*, *Kaakapuchuntar Njanakural*, *Sivavaakkiyar Njanam*, *Pooranaananthar Sivayoga chaaram* etc.

*Pranayama* is not the simple breathing exercise but it aimed at providing extra oxygen to the lung. The practices of *Pranayama* work mainly with *pranamaya kosha*. It is made up of five major *pranas* which are collectively known as *Panchapranas* namely

- *Prana*
- *Apana*
- *Samana*

- *Udana*
- *Vyana*.

In *Pranayama*, the *prana-vayu* is activated by the inward breath and the *apana-vayu* by an outward breath. *Udana* raises the energy from the lower spine to the brain. *Vyana* is essential for the function of *prana* and *apana* as it is the medium for transferring energy from the one to the other. Among which *prana* is the most important and it is the force by which breathe is drawn inside.

## **PHASES OF PRANAYAMA**

There are three phases namely

- 1) *Poorakam*
- 2) *Kumbakam*
- 3) *Rechakam*

- 1) *Poorakam*- It is the phase of inhalation.
- 2) *Rechakam*- It is the phase of exhalation.
- 3) *Kumbakam*-It is the phase of internal retention of breath. It is the time taken for absorbing inspired oxygen in blood circulation.

## **BREATHING TECHNIQUE**

- Place a blanket to avoid the gravitational force.
- Choose a secluded, clean, airy place, free from insects, and practice during quiet hours.
- Sit straight in any meditative asana posture.
- Left hand in *chin mudra* with closed eyes.
- Take up *Pranav mudra* and press the right thumb to right nostril.
- Inhale slowly and deeply through the left nostril
- Press ring and little finger to left nostril. Hold the air for few seconds.
- Release right thumb. Exhale through right nostril slowly.
- Close the left nostril with the thumb and inhale through right nostril (*poorakam*), holding the air by closing both nostril (*kumbakam*). Exhale through left nostril (*Rechakam*). This is one *Pranayama*. Repeat the same process. For a period 20-80 *Pranayama* are done.

- At the beginning, less practice may be multiple for many time. It purifies the *naadi* in three months. The sound of *rechakam* is *AM (HMM)* and the sound of *poorakam* is *CHAM (SAM)*.
- *Edakalai Vasiyogam* – *poorakam*, *kumbakam* and *rechakam* takes place in the left hemisphere.
- *Pingalai Vasiyogam* – *poorakam*, *kumbakam* and *rechakam* takes place in the right hemisphere.

## REJUVENATION TECHNIQUE

*“Yaeruthal poorakam yeeraettu vaamathaal*

*Aaruthal kumbakam arupathu naalathil*

*Vuuruthal mupath thirandathi rechakam*

*Maaruthal ondrinkan vanchaka mamae”*

*(Thirumanthiram 568)*

The inhalation is for 16 counts through the left nostril is “*poorakam*”. The retention of the air for 64 counts is “*kumbakam*”. The exhalation of the air for 32 counts through right nostril is “*rechakam*”. If this is done in any other way it is wrong. It is in the ratio of **1:4:2**. This can be repeated by exchanging the nostril for *poorakam* and *rechakam*.

*“Vayuvakarintu serith thadakil*

*Aayut peruka mundam”*

*(Avvai Kural)*

Normally during respiration we inspire 12 inches of pranic energy. But only 8 inches are being utilized by us. The remaining 4 inches of the pranic energy are wasted during expiration. *Pranayama* is the technique which ensures that the entire pranic energy is efficiently absorbed and utilized. The act of doing *Pranayama* will prolong one’s lifetime.

## BEST REPETITION FOR PRACTICE

As indicated in the Siddha literature, one can do *Pranayama* 4 times a day.

- One and a quarter of an hour since dawn
- Middle of the day

- One and a quarter of an hour before and after sunset
- Midnight

In addition, if *Pranayama* practiced in the evening cause the reduction of *kapha*; in the afternoon cause the reduction of *vatha*; in the early morning cause the reduction of *pitha* in the human body. The best time for practicing *Pranayama* is the morning in empty stomach after brushing the teeth and evacuating bowels and bladder.

## **BENEFITS OF PRACTISING PRANAYAMA:**

### **REDUCED RATE OF BREATHING:**

*Pranayama* helps to learn breathe deeply and slowly. This will reduces the rate of breathing which in turn reduces the “wear and tear” of internal organs. It relaxes the body’s nerves and lowers blood pressure. *Pranayama* allows the body to relax and be free of stress and tensions.

### **INCREASES LIFE**

Depending on the breathing rate, *Pranayama* increases the longevity of life. Lowering the breathing rate can increase the life. So, it is called as the rejuvenation therapy of life.

### **BRAIN**

By nose breathing, nanoparticles can directly reach the brain and cross the blood-brain-barrier. The air, we breathe through our nostrils enter the brain via the olfactory lobe and the rest goes to the lungs supplying the oxygen to the blood. Thus the air we breathe has a direct impaction brain.

Deep slow breathing through one nostril nourishes the part of the brain on that side. *Pranayama*, practiced in clean and open-air environment can negate many problems and stimulates the mind and body to lead the healthy living.

### **NERVOUS SYSTEM**

The autonomic nervous system (ANS) regulates the vital functions of the heart, lungs, circulatory system, urinary excretion, digestion and reproductive function. It is divided into the sympathetic and parasympathetic nervous system.

The sympathetic nervous system is responsible for increasing heart rate, blood pressure, muscle tone (tension) in the large skeletal muscles, sweat secretion, pupil dilation, and other functions. It helps the body gear up for physical exertion.

The parasympathetic nervous system provides rest and it is opposite to the sympathetic activity. It decreases heart rate, blood pressure, skeletal muscle tone, sleep and digestion.

With each cycle of the breath, stimulation occurs with these branches. Inhalation emphasizes sympathetic activity and exhalation emphasizes the parasympathetic activity.

The technique of 1:2 breathing deepens the parasympathetic activity. 1:2 breathing decreases the sympathetic activity, which in turn regulates the relaxation response.

## **RESPIRATORY SYSTEM**

The respiratory system is the gateway for purifying the body, mind and intellect. The act of breathing is so organized that the lungs are normally inflated 16 to 18 times a minute. Fresh air containing life-giving oxygen is sucked into them and gases containing carbon dioxide from the body tissues are sent out in exchange through the breathing passages. In pranayamic inspiration, diaphragmatic contraction is delayed. With breathing, both respiratory movements are kept in check and the respiratory center in the medulla comes under control. *Pranayama* purifies the breathing tube. It helps in strengthening the diaphragm. It provides the lungs with better supply of oxygen by opening the alveoli and it facilitates maximum oxygen absorption. With constant practice of *Pranayama*, one can utilize nearly 80% of their lungs. It helps in reducing the respiratory rate and it also reduces the stress and rejuvenates the body and helps to sleep better. It helps to get our lungs function properly and curing the breathing problems such as asthma.

## **OBESITY**

*Pranayama* is an active method for reducing weight. The practice of pranayamic techniques is an effective way to reduce the excess fat in the body. Some of the yogic breathing techniques are as follows:

- **Bhastrika or the Bellow breath** involves forced deep inhalation and exhalation. It oxygenates the blood and provides nourishment to the tissues and organs. It boosts the endocrine glands and rectifies the thyroid gland malfunction which will cause reduction in the weight.

- **Kapalabhati or the Skull Cleansing breath** involves normal inhalation and forceful exhalation. Exhalation cause the belly pulled inwards which in turn forces the diaphragm to move upwards. This can reduce the fat around abdomen and waist with constant practice.
- **Anulom Vilom *Pranayama* or Alternate Nostril breathing** involves slow and steady breathing through the left nostril by closing right nostril with right thumb. Then exhale through the right nostril by pressing left nostril with ring and little finger. Now, breathe in from the right nostril and exhale from the left nostril using the same method. This will be helpful in reducing the fat by increasing the metabolic functions.

## **HYPERTENSION**

Hypertension is a condition in which the arterial blood pressure gets increased than normal. With regular practice of *Pranayama*, mainly the alternate nostril breathing can be effective in controlling the hypertension. It cools down the body and reduces the blood pressure. It protects the heart from the secondary cardiac complications.

## **DEPRESSION, STRESS AND ANXIETY**

As simple as inhaling and exhaling, *Pranayama* teaches to control breathing and improve both physical and mental health. *Pranayama* allows focusing on breath and experiencing the healing benefits. It begins to relax, de-stress and clears our mind by practicing mindfulness, taking in deep breath and giving body the oxygen it needs to function properly.

It improves blood circulation and calms the mind which in turn cures the depression, stress and anxiety and it helps to fight diseases and improve overall health.

## **CONTROL OF EMOTIONS**

Respiration has direct link with our emotions. The more disturbances cause rapid increase in breathing. When the breath gets controlled, we can control anger emotions and restlessness.

## **IMPROVE CONCENTRATION AND MEMORY**

Regular practice of *Pranayama* increases the concentration power and memory by supplying more oxygen to the brain. It helps to overcome the concentration issues.

*Pranayama* reduces stress and calms the mind. The brain cells get rejuvenated when it is supplied with enough oxygen. Yoga also helps in improving mental control.

## **CORONARY ATHEROSCLEROSIS**

Coronary atherosclerosis is a major heart disease in which the cholesterol gets coated in the inner layer of the arteries of the heart. We call it as a heart blockage. With regular practice of *Pranayama* and yoga for a period of 1 year can decrease the number of anginal episodes. *Pranayama* cures and prevents the coronary artery disease by reducing the stress.

## **DIABETES MELLITUS**

*Pranayama* stabilizes the relation between pituitary gland and pancreas. It controls the movement of inhalation and exhalation and the reflection of vital energy. It reduces the blood pressure and weight of the body which are the possible causes of diabetes. It reduces the progression and severity of complications. It effectively reduces glucagon secretion induced by stress and improves insulin action. *Pranayama* reduces the level of stress hormone, cortisol and helps in reducing insulin resistance.

## **CANCER**

*Pranayama* is a possible intervention for chemotherapy receiving patients with cancer. It convalesce sleep disturbance, anxiety, insomnia, fatigue and mental quality of life. *Pranayama* practice can improve the chemotherapy mediated symptoms and relieves from the pain and distress.

## **PREGNANCY**

During the initial stages of labor, the release of oxytocin gets delayed due to the release of adrenaline which in turn delays the process of delivery. Practicing *Pranayama* for 1 hour daily can negate the negative energy, relax, and aid the body to release oxytocin to make labor easier and smoothen it. It also helps manage the pain by relaxing the body. The practice of *Pranayama* is safe during the menstrual period.

*Pranayama* results in an increase in birth weight, decrease in preterm labour and with no complications. Practicing *Pranayama* and yoga in the second trimester can cause significant reduction in physical pain. By practicing it in third trimester reduces the stress and anxiety. But, it should be done with the consultation of the gynecologist.

## **CURES DIGESTIVE PROBLEMS**

Practicing *Pranayama*, mainly skull cleansing breath daily helps in alleviating digestive problems and helps reduce bloating. The movement of abdomen while doing

*Pranayama* is good for the digestive system and cures the digestive problem. It improves all abdominal organs to function properly. It helps to be free from constipation.

## **DETOXIFICATION**

While exhaling, the impurities get removed from the body, thus cleansing ourselves. *Pranayama* cleanses the entire respiratory system by increasing the lung capacity and purifies the toxins from the blood. It cleanses and strengthens the liver so it can be effectively remove toxins from the body. It makes the mind and thoughts pure like the nature.

## **FIGHT SINUSITIS**

Sinusitis is a condition in which the sinus becomes inflamed and irritated. It produces mucous which cause trouble breath. *Pranayama* helps in cleaning the nasal air ways and makes the breath smooth and free from trouble breath. For treating and preventing sinusitis, the best *Pranayama* technique for practicing will be bellow breath which helps to treat the sinusitis symptoms such as head ache, throbbing feeling and facial swelling.

With alternate nostril breathing, one can reduce the sinusitis. *Pranayama* also cures asthma, congestion and rhinitis.

## **SKIN HEALTH**

*Pranayama* helps to rejuvenate, refresh and purifies the blood. This cleansing technique helps to reduce stress, toxins and negative emotions. This automatically leads to a fresh looking skin. With regular practice, skin gets cleared and there is a natural warm glow that takes over.

## **CONCLUSION**

In summary, this review postulates that *Pranayama* improves the parasympathetic activity and decrease the activity of sympathetic nervous system. It improves the respiratory function, cardiovascular function, digestion, decrease the effect of stress, anxiety, depression, hypertension and enhancing the metabolic function and increase the longevity.

Thus, yoga and *Pranayama* is a valuable tool in establishing and maintaining the physical, mental, and spiritual health and well-being of the individual.

Convert the life to yoga, so that you may ensure success in all the fields of activity.

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