REGULATION OF LIFE STYLE DISEASES THROUGH YOGA PRACTICES


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ARTICLE INFO

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Key words: Life style, diseases, yoga, aasanam, causes, cure, hyper tension.

ABSTRACT

A disease is a particular abnormal, pathological condition that effects part or all of an organism or a pathological condition of a part, organ or system of an organism resulting from various causes, such as infection, genetic defect or environmental stress, and characterized by an identifiable group of signs or symptoms. Depending upon the way it is affecting on a person ,we classify diseases in to several types .They are communicable diseases, heriditotry diseases , life style diseases ,seasonal diseases ,deficiency diseases ,heart diseases etc. Healthy life style factors are the primary prevention of coronary health diseases. Smoking; obesity, high blood pressure and physical inactivity are more prevalent among SEP (Socio Economic Position) person. Social inequalities in chronic disease morbidity and mortality will persist in the next decades (UN Report).Non communicable diseases are now the leading cause of death around the world, with developing countries hit fast, according to a new report from the WHO.WHO says the rise in life style diseases can be blamed on tobacco use, poor diet and harmful use of alcohol. A sharp rise in life style diseases such as heart problems and strokes coupled with a lack of adequate preventive health care threatens India's future growth prospects. Life style disease is a disease associated with the way a person or group of people lives. There are mostly common in developed nations where people are inclined towards eating un healthy food, having a sedentarily life style and an unhealthy habits like smoking and drinking alcohol. It can be prevented by making simple changes in daily routine and following a healthier way of living. Life style diseases or diseases of civilization are diseases that appear to increase in frequency as countries become more industrialized and people live longer. A disease associated with the way a person or group peoples lives. There are mostly common in developed nation where people are inclined towards eating unhealthy food, having a sedentarily life style and unhealthy habits like smoking, drinking and taking alcohol. They can include Heart disease, diabetic, Stroke, Alzheimers, Cirrhosis, Asthma, Hyper tension etc. These are caused to a large extent by dietary changes in relation to socio economic and living environmental conditions. The stress of modern living is causing enormous a burden on health care globally. Poor eating habits sleep deprivation and secondary life style has contributed to growth of life style diseases. Hyper tension is associated with the incidence of some diet related non-communicable diseases such as stroke and coronary heart diseases .Life style diseases are different from other diseases because they are potentially preventable, and can be lowered with changes in diet, life style, and environment and by supplement with vitamin D.

According to WHO, world's death from life style disease will double by 2015 unless all out effort is taken to combat them. Main causes /reasons of these life style diseases are Habits, Unhealthy lifestyles/Behaviors and Practices etc.It can be prevented by making simple changes in daily routine and following a healthier way of living.Few basic change includes quitting smoking ,avoiding alcohol, having a balanced diet that includes fresh vegetables and fruites ,regular physical activities and leading a stress free life.

Yoga is re-union of mind and body to the God. Depending upon the way in which it is practicing it can be divided into several types like” Khada yoga”,“Dhyana yoga”,“Raja yoga”,“Sidha yoga” etc etc.Normally Indians are practicing Khada yoga (hatha yoga).It is nothing but bending and stretching of the bodies. This is the only exercise which starts and ends with prayer to the God.Yoga practice imparting positive
INTRODUCTION

Over 50 years the food pattern changed considerably which changed our diet by the use of lots of processed foods, foods with saturated fats, foods with sugar content less and less fruits and vegetables. Decreased physical activity of humans, as machine pays the place of that. It leads to less usage of the energy which leads to diseases like stroke, obesity, hypertension etc.

Continuous and long time work without breaks (people working in IT/financial sector) which leads to spinal problems. Exposure to the same environments without physical or mental rest leads to malignancy of the path exposed, Lung diseases, cerebra vascular diseases etc.Use of junk foods ,packed foods for a long period leads to cancerous growth ,arthritis ,nutritional deficiencies etc.Excessive usage of mobile phones and computers by the youngsters leads to skin diseases, computer vision syndrome, depression , etc.

The situation is worse in a country like India where historically the ratio of Physician to population is 1700 to 1 at present, In july 2011 the state was 2000 to 1.With lack of expertise in complete disease management from a provider side and lack of understanding of life style diseases among people has created a complicated situation. Globally 14.2 million people between the ages of 30-69 years die prematurely each year from these diseases. These diseases have emerged as bigger killers than infectious or hereditary ones.

Patanjali Maharishi is considered as the father of yoga. In his yoga sutra on" yoga -chithavruthi nirodah ".This means yoga controls the actions of our mind or it is a balanced state of mind –brain system.

The concept of yoga practicing in our daily life is an holistic approach towards health as well as alternative form of medicine. Word yoga is derived from a Sanskrit word which means "union".The goal of classical yoga(khada yoga/hatha yoga) is to bring self –transcendence,or enlightenment ,through physical ,mental and spiritual health through the observation of controlled breathing (pranayama),prescribed postures (asanaas),and meditation(dhyana).Yoga and meditation combined with a low–fat diet and group support could significantly reduce the blockage of coronary arteries.

Yoga is useful to patients of heart diseases and hypertension .It affects hypothalamus and brings about decrease in the systolic and diastolic BP through its influence on vasomotor center, which leads to reduction in sympathetic tone & peripheral resistances. Studies revealed that yoga practice is useful for stress related problems such as blood pressure and cholesterol.Yoga and relaxation techniques keep the body fit and strong plus gives a feeling of well being. Yoga helps in increasing oxygen supply to the brain.

Yoga reduces anxiety, promotes well being and improves quality of life. Several investigations describe that yoga have beneficial effects on the functioning of the muscular, cardiovascular, respiratory, gastrointestinal and other systems.

Objectives of the study:

Life style –related diseases include Heart attack, Diabetic, Stroke and Cancer which are four main causes of death in India. The risk of developing such diseases is increased in life style with excessive alcohol consumption, tobacco use, unhealthy diet and remaining sedentary. It is the science of concentrating of our mind.

The ultimate goal of this study is to suggest some suitable life style/yoga to reduce /control these diseases.

Causes /Reasons for life style diseases:

HABITS: Diet and life style are major factors thought to influence susceptibility to many diseases. Drug abuse, tobacco smoking and alcohol drinking as well as lack of exercise may increase the risk of developing diseases especially later in life.

UNHEALTHY LIFE STYLES: The unhealthy life style behaviors are , having low quality diet and being physically inactivity and sedentary life.

PRACTICES: Excessive eating, Untimely sleeping, watching TV throughout, Hard work without rest are some of the practices leads to life style diseases.

How the life styles leads to diseases:

We can understand that almost all diseases are caused by the improper way of taking food. Increasing globalization brings nothing but the changing life style, ignorance of health by sticking to the strict pattern of jobs. The arousal of such crisis is just because of in appropriate relationship of people with the environment. The specialty of the life style diseases is that it takes years to develop, if occurred once; it is not easy to cure.

What is yoga and its practices:

When we talk about yoga, immediately coming to our mind is sitting/standing posses of “yogis/munees/ hermits/sanyasees/rishees "for prolonged time in prayer. Normally we are following” Khada yoga.”It is stretching and bending of body. Not give over strain/pain/uncomfortability while practicing yoga. Whatever the posses/yoga we are following, each have its own impact on controlling/curing life style diseases.

The role of yoga is controlling the origin and progress of various diseases as follows.

1) Diabetic Mellitus: Diabetic due to increase of blood sugar level. It may be Type1 and type 2.It is also described a group of metabolic diseases in which the person has higher blood glucose (blood sugar) ,either because insulin production is inadequate or because insulin is in adequate or because the body’s cell do not respond to properly insulin or both.

To reduce diabetes: practice :“Bhujanga asanam”, “Dhanurasanam”, “Salabhasanam”, “Nadi sodhana pranayamam”
2) **Cardiac disease** classified into four. They are Heart valve problems, arrhythmia, Heart attack and stroke. A heart attack occurs when the blood flow to a part of the heart is blocked by a blood clot. If this clot cuts off the blood flow completely, the part of the heart muscle supplied by that artery begins to die.

To prevent/control heart attack/cardiac arrest by practicing of “Artha pavana mukthasanam”, “Vakrasanam”, “Thadsanam” is good.

3) **Obesity** is a medical condition in which excess body fat has accumulated to the extend that it may have a negative effect on health leading to reduced life expectancy and or increased health problems. If the BMI (body mass index) is 25 to 29.9 is treated as over weight and above 30 treated as obesity cases.

To reduce obesity: “surya namaskaram”, “Ushtasanam”, “padahasthasanam”, “sarvangasanam”. By doing this yoga/aasanas fat metabolism will be increased. This fat metabolism from abdomen, thigh and buttocks etc will enhance obesity control.

4) **Hypercholesterolemia** is the presence of high levels of cholesterol in the blood. It is a form of hyperlipidemia(elevated levels of lipids in the blood) and hyper lipo proteinemia(elevated levels of lipoproteins in the blood).

To reduce Cholesterol practicing of “bhujangasanam”, salabhasanam”, surya namaskaram”, “Artha matsyasanam” is good.

5) **Hyper tension** or high blood pressure is the measure of strength or force exerted by blood on the walls of the vessels it is flowing through. This pressure largely depends on the efficiency with which our health pumps the blood throughout the body. Harder the heart pumps, narrower the arteries become exerted on the walls of the arteries.

To reduce Blood pressure practicing of : “Bhujangasanam”, “Parswa thirkonasanam”, “Paschima uthasanam” “sasa sanam”, “meludhenda sanam” “dhanursanam”, “Yoga nidhra” are found effective.

Most of the life style diseases can be controlled by practicing various types of pranayamas, yogasanas etc.

**Role of "Mantra":** Practicing of “OM” mantra vibrating the central nervous system. For stream lining the mind, nervous system etc it is an exercise. By simply doing the “OM”, we are co-creating and sponsoring the process of god’s creation and allowing ourselves to become witness of the revelations of god’s everlasting work, god’s love and god’s support towards all of us(Budha mahreaya the Christ)

**Materials and methods:**

It is observed that number of male participants is more compared to the female participants. So participants chosen/selected according to their strength. Participants’ undergone 3 months basic training was chosen for sample. They were practicing one hour daily and practiced “pranayamaas, Padahasthasanam, Nokasanan, Savasanam, suhasanam etc” regularly. Before start yoga, they had not undergone any type of exercise or practices like Gymnasium, Kalari, Kunfu, Karate etc.

The study conducted among 60 participants who came for practicing yoga and having regular attendances. The selected respondents do not have any cholesterol, BP etc in hereditary. The age group of the respondents was between 20 to 70 years. They were selected from different centers were they are practicing yoga. Data collected from both male and female participants. Before starting the practices of yoga the respondents Sugar, cholesterol etc were checked. After the completion of the course (3 months) their Sugar, cholesterol etc checked and observed that a good improvement in the parameters. Not marked difference noticed in the blood pressure of the participants after the participants 3 months of practices, may be due to short duration of observation. Athletes were excluded from the survey. All the participants were followed same type of diet and during yoga practice food habits were not changed.

While the participants joined for yoga they were not in a position to sit in “sahasanam”. But it is observed that before the end of the course they were able to sit in “sahasanam” for prolonged time.

**How life style leads to diseases:** We can understand that almost all diseases are caused by the improper way of taking food. Increasing globalisation brings nothing but the changing life style, ignorance of health by sticking to the strict pattern of jobs. The arising of such crisis is just because of in appropriate relationship of people with the environment. The specialty of the life style diseases is that it takes years to develop, if occurred once; it is not easy to cure.

**Measures for preventing life style diseases:**

Daily practice some yoga like “Sooarya Namaskaram”. Yoga practices can also be oriented on the prevention of diseases involved(each yoga practice have its own advantage to keep away/control some diseases). Practice of “pranayama”. Chanting of some “mantras” daily. Reading of religious books daily. While practicing the pranayamas normalizing the cardiac efficiency and peripheral resistance BP is getting controlled.

Decrease the usage of mobile phone, computer, smart phones etc. Make both mind and body comfortable. Reduce the consumption of alcohol and smoking. Use of medicated smoke and other Paniyas(drinks ) instead of that. Practice of meditation. Continuous use of mobile phones creating radiation, effect hearing imbalances, neurological diseases. While watching TV continuously –giving strain to eye which leads to opthalmic diseases.

Consumption of low energy dense foods which are fewer in calories per unit volume. Thus one can eat large volumes if it avoiding processed foods. Utilization of more physical and mental power ,than the usage of machines. Making a happy environment in home, to be calm from the hectic load at the work place. Taking small breaks from the work by taking some nourishing food suitable for the time.

**Tables of study:**

1) Number of participants:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>45</td>
<td>15</td>
<td>60</td>
</tr>
</tbody>
</table>

Majority of the participants are male

2) Age group of the participants:

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>20-30 yrs</th>
<th>30-40 yrs</th>
<th>40-50 yrs</th>
<th>50-60 yrs</th>
<th>60-70 yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of participants</td>
<td>5</td>
<td>20</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td>60</td>
</tr>
</tbody>
</table>

Majority of the participants are in the age group of 30 to 40 years

3) Blood sugar (FBS) (a) Before practicing yoga
It is observed that after the practice of yoga for a period of 3 months, majority of the participants cholesterol reduced to normal and all the participants cholesterol reduced to a controllable limit.

<table>
<thead>
<tr>
<th>Age group in years</th>
<th>Total participants</th>
<th>Participants/practitioners having over weight/obesity</th>
<th>Participants/practitioners without obesity/normal value</th>
<th>Average BMI value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>1-30.5, 4-between 19 to 24.4</td>
</tr>
<tr>
<td>30-40</td>
<td>20</td>
<td>2</td>
<td>18</td>
<td>2-27.5, 29.3, 18-between 16.8-24.5</td>
</tr>
<tr>
<td>40-50</td>
<td>15</td>
<td>1</td>
<td>14</td>
<td>1-27.2, 14-16nos 19.2 to 24</td>
</tr>
<tr>
<td>50-60</td>
<td>12</td>
<td>1</td>
<td>11</td>
<td>1-27.2, 11-between 18.8 to 24.8</td>
</tr>
<tr>
<td>60-70</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>2-26.28, 26.28 to 24.2</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>7</td>
<td>53</td>
<td></td>
</tr>
</tbody>
</table>

It is observed that after undergoing the 3 months practice of yoga, the BMI of participants (noted as over weight/obese) has improved its value as nearly come to normal value of obesity.

**RESULTS/FINDINGS:**

1) After practicing of yoga for three months, participants blood sugar drastically come down to normal or nearer to normal value. Dhanura sanam, salabha sanam etc are practiced to control this blood sugar which leads to control diabetism.

2) Total cholesterol level of the participants who under gone this three months practice of yoga was able control their total cholesterol value to a controllable level. Surya namaskaram, arthha matyasamnam etc is hailed the cholesterol of the participants to a limited value.

3) It observed in general that the participants are becoming more fresh leading a peaceful and happy life, without any stress or tension.

**CONCLUSION AND SUGGESTIONS**

We conclude that yoga practice is effective for reduce hyper tension. Most of the life style disease can be controlled by practicing yoga. What is needed today is an extension of focus from organ based expertise. A new holistic approach required which need dedicated team effort of Physician, dietician, yoga experts and physio therapists who work across their traditional silos. Yoga is effective for controlling all types of diseases.

**Ideal daily routine description:**

Go to bed by 10:00 PM. Arise before 06:00 AM. Evacuate bowels and bladder. Clean teeth, scrape tongue. Exercise. Oil massage, then bath/shower. Wear clean, comfortable, natural fabric clothing. Light brake fast. After noon: Take warm cooked food. Take 10 minutes rest after food. Evening: Light evening meal. 10 minutes rest followed by few minutes walk.

**Avoid:** Over time work, Watching TV/reading paper in late night daily which make imbalance in our bodies functioning. Fibrous food is suitable for our gastro intestinal system.

**Things to maintain a healthy life style:**

A healthy life style boost your energy, improve your mental out look and enhances your quality of life. Regardless of your current health, you can begin making positive life style change today, maintaining a healthy life style. Try to keep waist to hip ratio less than 1. Keep body mass index (BMI) healthy normal value. Take/include more vegetables in your food, take non vegetarian once in a week. Try to avoid fried food items. Alert about CAUTION

C – Change in bowel habits
A - sore that does not heal
U - Unusual bleeding or discharge
T - Thickening or a lump
I - Indigestion or difficulty in swallowing
O - Obvious change in wart or mole
N - Nagging cough or hoarseness'

Always think positively, act positively, behave positively.

It is our own responsibility to maintain our health. Basic foundations of health starts from the kitchen. To maintain good health, kitchen should be hygienic/neat / clean. Donnot pollute the community as whole by our own waste. Try to avoid taking fast food from road.
sides/paths/open space. Health giving foods and proper exercises should be our life style. Inner purity and environmental cleanliness is an inevitable part of our life.

**Benefits of yoga:**

Yoga has so many benefits. Some of them are

1) *Harathi sakala rogan-* all diseases could be cured.
2) *Sthairyamarogyamangalavanyam-* Body becomes healthy and beautiful.
3) *Jatharapradeeptham-* digestion become easy.
4) *Aseshadoshamaya soshaneecha-* impurities will be eliminated.
5) *Kayasya krusatha kanthi-* body becomes lean.
6) *Divyadrushti pradayani-* power of prediction or foreseeing could be mastered.
7) *Kapharogasccha visethi prayanthyeva nah samsayah-* problem related to kasha could be eliminated undoubtedly.

More over ,the practice also provides ashtaiswryas. *Anima, Mahima, Laghima, Garima, Ishvitam, Vashvitam, Prapthi and Prakamya* are the Ashtaiswryas.

**Instructions before practicing yoga:**

1) The suitable time for the practice is at Brahma muhurtha.(4.30 AM to 6.00AM)
2) East or North facing is more beneficial, that gives positive energy.
3) It is recommended to practice on a bed sheet or on a carpet.
4) Practices should be on an empty stomach.
5) Minimum possible dress is required for the practice.
6) The selected place should be clean and dry.
7) That place should be calm and quiet.
8) Maximum concentration should be provided for the practice.
9) It is advisable to practice after the bath; on the other hand, take a bath at least half an hour after the practice.
10) Practicing place should be open and have fresh air circulation.
11) During the practice if the body sweats, then do not wipe it out with towel or with other means but rub the body with palm.
12) Practice should be in a relaxed manner.

**REFERENCES/BIBLIOGRAPHY:**

1) *The Life style diseases time bomb* by Peter gluckman and Mark hanson.
2) *Prevention of chronic diseases by means of Diet and life style change* by Walter willet, J P koplan etc.
3) *Yoga journal .com,old issues.*
4) *Light in yoga* by BKS Iyengar.
5) *The chemotherapy of Malignant diseases* by H H Sedlacek,K Hoffman etc.
6) *Encyclopedia of junk food and fast food* by Andrew F Smith.
7) *Yoga a pragmatic science* by Dr Toms Abraham.