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# PREVENTION AND MANAGEMENT OF NON-COMMUNICABLE DISEASES AND LIFESTYLE DISORDERS BY LIFESTYLE MANAGEMENT MODALITIES AND YOGA

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#### **ABSTRACT**

Ayurveda is a science of life that explains about Health and prevention of the disease with a tagline "स्वास्थरय स्वास्थ रक्षणम". Today in the era of globalisation whole world is growing towards the progress and development. However, in this race of modernization, modern lifestyle has improved the quality of life by badly impacting on life and health. Nowadays lifestyles are more likely moving towards Ahitayu (the things that are harmful for the living beings) which result into various lifestyle disorders and turns into harmful Non-communicable diseases. Lifestyle disorders are known internationally as non-communicable diseases (NCDs). NCDs are chronic in nature and cannot be communicated from one person to another. These are resulting from combination of factors viz. genetics, physiology, environment and behaviours. NCDs, e.g. heart disease, overweight/obesity, asthma, cancer, irritable bowel syndrome, type 2 diabetes, hypertension, etc.,

kill 41 million people each year, equivalent to 74% of all deaths globally. This study is conducted to know about causative factors of NCDs such as improper dietary habits, sedentary lifestyle, lack of physical activities, use of tobacco, alcohol and drugs, etc. and find ways for preventing these disorders. As mentioned in the Ashtanga hridaya sutrasthan, for the achievement of four Purusharth, being healthy is foremost important. The study concludes on lifestyle disorders and NCDs could be cured and prevented by adaptation of improved lifestyle modalities according to Ayurveda. This study helps to tackle all the triggering factors of NCDs like stress, sleep deprivation and ill habits like smoking, alcohol, tobacco

etc. which intern prevent the occurrence of lifestyle disorders and promoting the highest state of health.

**KEYWORDS:** Lifestyle disorders, Non-communicable diseases (NCD), Dincharya, Ritucharya, Yoga, Ayurveda, Panchakarm.

#### INTRODUCTION

Ayurveda, often referred to as the science of life, is a comprehensive system that focuses on maintaining health and preventing diseases withthe motto 'Swasthsya Swasth Rakshanm'. [1] It not only offers insights into disease management and treatment but also emphasizes its remarkable efficacy. In today's era of globalization, the world is making significant strides in progress and development. However, amidst this march towards modernization, lifestyles haveundergone substantial changes. While the quality of life has improved in the modern era, ithas also brought about detrimental effects on health and overall well-being.

Ayurveda talks about hitayu and ahitayu. [2] Today's lifestyle is more likely moving towards ahitayu i.e. the harmful things for the living beings are being involved in life, e.g. unhealthy diet, fast food, improper dietary habits, sedentary lifestyle, lack of physical activities, exercises, yoga and meditation, increasing dailystress, use of tobacco, alcohol and drugs, etc. resulting into various lifestyle disorders which turns into harmful non-communicable diseases.

Lifestyle diseases are characterized by the diseases whose occurrence is primarily based on he daily habits of people and are a result of an inappropriate relationship of people with their environment. Lifestyle disorders are known internationally as non-communicable diseases (NCD). NCD are chronic in nature and cannot be communicated from one person to another. They are a result of a combination of factors including genetics, physiology, environment and behaviours.

Non-communicable diseases kill 41 million people each year, equivalent to 74% of all deaths globally. [3] Each year, 17 million people below age 70 die from a NCD; 86% of these premature deaths occur in low- and middle-income countries.<sup>[4]</sup> In 2017, India witnessed 61.8% ofdeaths due to non-communicable diseases.<sup>[5]</sup>

Most commonly found lifestyle disorders are heart disease, stroke, overweight /obesity, type II diabetes and lung cancer. Other diseases viz. Alzheimer's disease, arthritis, atherosclerosis,

asthma, chronic liver disease or cirrhosis, chronic obstructive pulmonary disease, colitis, irritable bowel syndrome, hypertension, metabolic syndrome, chronic kidney failure, osteoporosis, PCOD, stroke, depression, obesity and vascular dementia are arising in the countries having increased industrialization and people living around those industries for longer period of time. NCD majorly refer to cancers, diabetes, hypertension, cardiovascular diseases like heart attack and stroke, mental health and others.

Ayurveda is a science of medicine which has served for the benefit of mankind since ancient times. And its knowledge is still helpful in managing new days' lifestyle disorders and NCD. It has the solution for prevention andmanagement of diseases in very wise ways.

#### AIM AND OBJECTIVES

- To study causative factors of lifestyle disorders and non-communicable diseases (NCD).
- To prevent lifestyle disorders and NCD through Lifestyle Modalities and Yoga.

#### CAUSATIVE FACTORS OFLIFESTYLE DISORDERS AND NCD

When examining chronic diseases and their potential connection to the environment, it is important to consider lifestyle risk factors that could play a role in their development. Four personal behaviours that mainly affect chronic diseases are lack of physical activity,

- 1. poor nutrition,
- 2. tobacco use and,
- 3. excessive alcohol use.

There are a number of risk factors that lead to theonset and development of NCD. The various types of risks can be divided into three primary risk sets. Many of which are common for number of diseases.

#### **Modifiable Behavioural Risk Factors**

Excessive use of alcohol, bad food habits, eating and smoking tobacco, physical inactivity, wrong body posture and disturbed biological clock increase the likelihood of NCD. The modern occupational setting (desk jobs) and the stress related to work is also being seen as a potent riskfactor for NCD.

#### b. Non-Modifiable Risk Factors

Risk factors that cannot be controlled or modified by the application of an intervention are called as non-modifiable risk factors. These are as follows.

- 1. Age
- 2. Race
- 3. Gender
- 4. Genetics

## c. Metabolic Risk Factors

These lead to four major changes in themetabolic systems that increase the possibility of NCD such as increased blood pressure, obesity, increased blood glucose levels or hyperglycaemia, and Increased levels of fat in the blood or hyperlipidaemia.

Increased blood pressure is the leading metabolic risk factor globally with 19% of the global deaths attributed to it, followed by obesity and hyperglycaemia.

#### PREVENTION AND MANAGEMENT OF LIFESTYLE DISORDERS AND NCD

Ayurvedic principal of tridosha states that all dosha i.e. vat, pitta, kapha should be in equilibrium to maintain condition of health. The definition by Sushrut also states "समदोष समागिन समाधात् मलिक्रया प्रसन्न आत्मइंद्रिय मन स्वस्थ इति अभिधियते" which indicates state of complete health. To achieve this various way are defined in ancient classical texts. Those can be divided broadly into two categories viz. Lifestyle Changes/ Lifestyle management Modalities and Yoga.

## a. Lifestyle Management Modalities

#### i. Samyak Ahar

It means good eating habits such as avoiding overeating, avoiding fatty foods, fast food or processed foods. One should fix the schedule and have a balanced diet with all vitamins, minerals, macronutrients and micronutrients.

#### ii. Dincharya

The activities or regimen which needs to be followed daily, by every individual is called Dincharya. It is advisable to wake up during Bramha Muhurta (preferably between 4.00 a.m. to 5.30 a.m.) followed by Dantdhavan, Abhyang, Vyayam, Snan, Anjan, Nasya, etc.<sup>[7]</sup>

## iii. Ritucharya

Ayurveda explains Ritucharya as a set of rules to follow in each season to keep ourselves healthy and to prevent seasonal diseases.<sup>[8]</sup>

## iv. Achar Rasayan Sadvritta

Codes of Good Conduct given in Charak Samhita helps in maintaining a healthy body and a peaceful mind. [9]

## v. Acharan (Aahar / Vihar)

Lifestyle according to the prakriti of the person shall be followed and maintained.

#### vi. Panchkarma

The process based on disease under treatment shall be determined and carried out. Also, season-wise panchakarma procedures should be followed.

#### vii. Sharir Shuddhi Kriya

Shatkarma i.e. neti, dhauti, nauli, basti, kapalbhati, and trataka shall be routinely carriedout.

#### b. Involvement of Yoga in Daily Routine

For achieving the spiritual and mental health along with physical health, yoga and meditation helps in many ways. The holistic art and scienceof yoga is the best lifestyle ever designed and is effective in managing prevalent lifestyle disorders. It has been reported that even a short lifestyle modification and stress management education program based on yoga reduces risk factors for cardiovascular diseases and diabetes within a period of 9 days<sup>[10]</sup> while a systematic review of 32 articles published between 1980 and 2007 found that yoga interventions are effective in reducing body weight, blood pressure (BP), glucose level, and high cholesterol.<sup>[11]</sup> Stress plays a vital role in inducing, precipitating, or worsening all lifestyle disorders and hence it is imperative to understand that we can manage it better throughyoga.

#### i. Yoga Asanas

Standing postures such as Tada Asana, Trikona Asana, Padottana Asana, Hasthapada Asana, Padangushta Asana, and Mehru Asana are useful. Prone postures like Bhujanga Asana and Ardha Shalaba Asana while useful sitting postures are Vakra Asana, Gomukha Asana, Ushtra Asana, Shashaha Asana, and Yoga Mudras.

#### ii. Pranayam

Savitri, nadi shuddhi (anuloma viloma in the Gitananda tradition), and bhramari pranayama are excellent practices to reduce stress.Pranayamas such as sheetali and sitkari also produce a sense of relaxation.

#### iii. Kriyas

It means to cleanse the toxins. Patients capable of doing cleansing practices such as kunjal, nauli, kapalabhati, agnisara, shanka prakshalana are deemed fit for the individual predisposition.

#### iv. Mudras

Viparita karani, shanmuki mudra, and brahma mudra are useful for reduction of stress in turn the NCD.

## v. Dharana and Dhyana

Concentrative practices that induce a state of meditation include the popular om japa which also helps in the process of prevention of NCD.

#### **CONCLUSION**

Lifestyle disorders are the results of an unbalanced diet. One could get trapped in a lifestyle disorder if their eating habits are linked to skipping meals, overeating, and high intake of sugar and oily foods. A person who follows an unhealthy diet lacks nutrition in all its forms. There is a need to control and balance all desires to gain a healthy lifestyle. Discipline plays a most important role in lifestyle management. Asmentioned in the Ashtanga Hridaya Sutrasthan "धर्म अर्थ काम मोक्षार्थ आरोज्य मुलमुत्तमं". This means, for the achievement of four purusharth, being healthy is foremost important and for this purpose we have to follow the lifestyle modalities as described in Ayurveda.

Ayurveda effectively describes many ways to manage lifestyle disorders. To get rid of various lifestyle diseases, Ayurveda provides solutions in the form of a healthy lifestyle strategy, proper diet management, detoxification, and regeneration. We should follow dincharya from bramha muhutra till the end of the day and also have control on unhealthy foods. There is a need to eat wisely and have complete nutritious diet. One must involve exercises, yoga and meditation in his / her daily mornings, that will be helpful to keep our day happy and healthy, thus ultimately providing us with a complete state of health.

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