

Review on Ayurvedic Preventive Measures for Non Communicable Diseases.

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ABSTRACT

A non-communicable disease (NCD) is a disease which cannot be transfer directly from one person to another. Non-communicable diseases (NCDs) internationally also known as chronic diseases and are defined as an impairment of bodily structure and or function that necessitates a modification of the patient's normal life and has persisted over an extended period of time. (EURO Symposium 1957). Most epidemiologist accept that a setof 'risk factors'(genetic, physiological, lifestyle and environmental) are responsible for a major share of adult NCD morbidity and premature mortality. According to WHO, four main types of NCDs are cardiovascular disease, cancer, chronic respiratory disease and diabetes. The increasing prevalence in most countries making NCDs, the leading cause of death globally. 57 million deaths occurred worldwide during 2016 of these 41 million were due to NCDs. Cardiovascular diseases are responsible for around(17.9 million)people die annually, followed by cancer (9.3 million), respiratory disease (4.1 million) and diabetes (1.5 million). Ayurveda is known as leading life science and describe way to prevent the risk factors of NCDs and manage lifestyle disorders in the forms of proper dietary management (Aahar),lifestyle (Vihar) the advice of daily and seasonal regimen (Dincharya & Ritucharya), Good conduct (Sadvritta) and rejuvenation therapies (Rasayana) Achara Rasayana, which is helpful in attaining a healthy and disease-free living. Ayurveda describes three pillars for healthy life i.e. (Trayopstambha).Aahar (proper diet), Nidra (proper sleep) and Brahmcharya (celibacy). They affect the physical, mental, ethical, social and spiritual well-being.

KEY WORDS-Non communicable disease, Dincharya, Rasayana, Aahar, Aacharrasayana.

I. INTRODUCTION

NCD's (Noncommunicable Diseases)¹

NCDs include cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes.

NCDs also included autoimmune diseases, strokes, most heart diseases, most cancers, chronic kidney disease, osteoarthritis, osteoporosis, Alzheimer's disease, cataracts, Parkinson's disease and others.

India is experiencing a rapid health transition with a rising burden of NCDs causing significant morbidity and mortality in urban & rural population with considerable loss in potentially productive years (35-64 years).

The risk factor responsible for major NCDs-

1.Modifiable Behavioural Risk Factors

- Tobacco Use (Direct use & second-hand smoke)-7 million deaths
- Insufficient Physical Inactivity-1.6million deaths
- Unhealthy Diet-4.1million deaths
- Harmful use of alcohol-3.3million deaths
- Stress & other psychological factors

2.Metabolic/Physiological Risk Factors

- High Blood pressure-9.4 million deaths
- Overweight/obesity-2.8 million deaths
- Hyperglycaemia
- Raised cholesterol-2.6 million deaths
- Heredity

3.Environmental Factors

- Level of sun exposure
- Exposure to air pollution
- Exposure to noise pollution

4.Non-Modifiable Risk Factors

- Age
- Gender
- Ethnicity
- Heredity

Ayurveda and Non communicable diseases

Life style disorders (NCDs) are the main group of disorders which occur in the individual due to non-following of daily activities as explained in the Ayurvedic classics.

As Ayurveda deals with prevention of health of healthy persons by following Dincharya & Ritucharya by making suitable changes in the Aaharand Vihar in daily & seasonal routine, following Pathyapathya kalpna(Do's and Don'ts) Sadvrita (good code of conduct) Aacharrasayana, suppression of Dharaniya Vegas, not to suppress Adharaniya Vegas,not doingHina, Mithya and Ati Yoga of Indriya, Kaya, Vacha and Mana (Praghyaparadha)helps in theprevention of NCDs.

1.Concept of Aahar

All matter in the universe, according to Ayurveda, is composed of five basic elements, Pancha Mahabhootas, which are Earth (Prithvi), Water (Ap), Fire (Teja), Air (Vayu) and Ether (Akasha) including the human body and food.

Tridoshas i.e. Vata, Pitta and Kapha that make up the body are also made up of Panchamahabhootas.

- Vata- Vayu and Akasha mahabhoota,
- Pitta -Agni and Jala mahabhoota.
- Kapha- Jala and Prthvi mahabhoota.

Planning and following a balanced diet of these elements maintains homeostasis in the body. Each type of food can have a dosha-stimulating, dosha-calming or dosha-balancing effect in the body. A specific diet has been mentioned in Ayurveda to keep the balance of the Doshas disturbed due to various factors like season, age, etc. The food has six basic tastes and each has the advantage of special elements of the Pancha mahabhoota that have a specific effect on the Tridoshas & Dhatu.

- Madhura rasa (Sweet)-Prithvi&Aapelements,
- Amla(Sour)rasa-Prithvi&Agni

- Lavana(Salt)rasa-Aap&Agni,
- Katu(Pungent)rasa-Agni&Vayu,
- Thikta(Amer)rasa-Vayu&Akash
- Kashaya(Astringent)rasa-Prithvi&Vayu.

It is mentioned that sweet, sour and salty medicines reduce Vata, those with acrid, sweet and bitter taste reduce Pitta and those with acrid, pungent and bitter taste reduce Kapha dosha.

In Ayurveda, specific principles are described for the consumption of a diet. It is not possible to get all the benefits from food, based solely on the amount ingested without considering methods of its intake (Aahar vidhi vidhan, Ahar vidhi Vishesh Aayatana, Dwadash ashan wihar) such as-

- Prakrti(qualitycharacteristicsoffood),
- Karana(foodprocessing),
- Samyoga(results)Combinationoffoods),
- Rashi(FoodAmount),
- Desha(HumanHabitat),
- Kala(TimeandSeasonalVariation),
- UpayogaSamstha(VariableDigestibilityofFood Types)
- Upayokta(FoodConsumer).²

Diet is not only needed for continuity of life, but for Bala, Varna, Upachaya etc. Proper diet taken in proper manner can lead to better health.

Viruddhahara (Dietetic Incompatibility) 3

The food with incompatible or contradictory qualities has poisonous effect on the body that aggravates

Tridoshas in turn leading to various disorders viz: Gulma (Lump), Allergies Skin diseases, blindness, impotency etc.

The dietary incompatibility is due to-

- Deshviruddha(climate),
- Kala viruddha (season),
- Agni viruddha (digestivepower),
- Matra viruddha(quantity),
- Satmya viruddha(adaptability/customization),
- Doshas viruddha (tridosha),
- Samskara viruddha(modeofprocessing),
- Aharavirya viruddha (potencyoffood),
- Kostha viruddha (bowelhabits)
- Avastha viruddha(stateofhealth)
- Krama viruddha (orderoffoodintake),
- Parihara viruddha (restriction),
- Upachara viruddha (prescription),

- Paka viruddha
- Samyoga viruddha(combination)
- Hrida viruddha(delicious),
- Sampat viruddha(richnessofquality)
- Vidhi viruddha(rulesofeating).

Few Virruddhahara mentioned in the classics are fish or its soup along with milk, milk or milk products with alcoholic beverages, radish consumed with milk and lotus stem with honey etc.

2. Concept of Vihara (Lifestyle)

The Dinacharya, Ritucharya and Sadvritta, Aachar rasayana are parts of ideal Lifestyle measures mentioned in Ayurvedic classics for maintenance of health and also to achieve a long, healthy active life, providing relief from pain and disease. Detailed description of personal hygiene encompasses diet and regimen during daily routine (Dinacharya), seasonal routine (Ritucharya) and behavioral, rules of good conduct (Sadvritta) and description of suppressible (Dharniya vega) & non suppressible (Adharniya vega) urges is available in Ayurveda.

Dinacharya(Daily regimen)⁴

Should wake up at Brahma Muhurta

- Heed the call of nature
- When brushing your teeth, you should use a soft brush made from twigs such as kadira, karanji or apamarga.
- It is recommended to clean the tongue with a long flexible metal strip or a twig. It not only cleans the tongue, but also promotes digestion. The mouth also needs to be cleaned thoroughly.
- Chewing the areca nut (khadira) on the betel leaf and aromatics like cardamom and cloves will freshen the mouth and improve digestion.
- Daily full body massage (Abhyanga) with oil is required. Oil massage brings softness and smoothness to the skin, free circulation of joints and muscles, peripheral circulation and elimination of metabolic toxins.
- Regular exercise (vyayama) is essential for perfect health. It increases stamina and resistance to disease, purifies body channels (meal) and increases blood circulation. It increases the efficiency of organs in the body, promotes appetite and digestion, and prevents obesity. - Daily full body massage with dry java powder, cola and udvartana.

- Bathing (Snana) improves passion, strength, sexual energy, appetite, longevity and removes sweat and
- other impurities from the body. After bathing, put on clean clothes and apply perfume on your body.
- You must regularly shave, cut your hair (kshaura karma) and cut your nails (nakh apkarthana).

Ritucharya (seasonal diet)⁵

- In the Ayurvedic classics, much consideration is given to the seasons, in addition to the diet of the day and night. The whole year is divided into six seasons, and a detailed meal plan for these seasons is prescribed.
- In spring, a spicy, hot and astringent diet is recommended while salty, sour and sweet foods should be avoided. Wheat, barley, honey syrup, fruit like mango, jackfruit, etc. and wild animal meat is encouraged.
- In the summer, due to the hot climate, Pitta disease occurs more seriously. That's why pitta quenches a cold, liquid, sweet and fatty diet recommended. Excessive salty, spicy and sour foods should be avoided. It is recommended to eat rice, milk, buttermilk, sugar, grapes, coconut water, wild animal meat.
- During the rainy season, more severe vata disease occurs, so sweet, sour and salty vata shamaka foods and drinks are preferred above all. Food should be hot, dry, greasy and easy to digest. Canned rice, wheat, barley and lamb soup are recommended.

Sadvritta (Code of Good Conduct)

Ayurveda prescribes certain rules for maintaining a healthy mind. These are principles of good conduct that

apply to everyone, anytime and anywhere. Their practice brings balance and harmony to the mind. It's a-

- Whenever possible, dedicate your service to God, the wise, and the elderly or respectable.
- Always tell the truth
- Don't get angry in any way
- Don't get addicted to sensory pleasures.
- Don't hurt anyone.
- As far as possible, don't let yourself get in trouble.
- Try to control your passions.
- Try to say nice, sweet words.

- Meditate daily to calm your mind.
- Observe the cleanliness of everything. ∞ Patience
- Observe self-control
- Try to spread knowledge, good advice and help to others.
- Direct and kind.
- Avoid irregularities in daily activities.
- Avoid overeating, drinking too much, having too much sex, sleeping too much or not getting enough sleep.
- Behave according to when and where you live.
- Behave in a courteous and polite manner at all times.
- Control your sense organs.
- Make a habit of doing all that is right and avoiding all that is wrong.

Dharniya & Adharniyavega vega⁷

Obeying certain regulations and prohibitions set forth by Ayurveda ensures physical, mental and spiritual health.

Demand cannot be disassembled.

There are thirteen natural cravings. their elimination leads to many diseases as given below: Inhibiting the urge to urinate leading to dysuria, urinary stones, bladder distension and urinary tract inflammation.

- Suppression of the need to defecate leads to abdominal pain, indigestion, flatulence and headaches.
- Suppress flatulence leading to colic, indigestion, heart disease, constipation or diarrhoea.
- Inhibiting ejaculation can cause stones (sperm), testicular pain, and difficulty with intercourse.
- Suppressing vomiting will produce various diseases such as urticaria, dizziness, anaemia, hypersecretion, skin diseases and fever.
- Suppression of sneezing can lead to chronic rhinitis and colds, headaches, sinusitis and respiratory system diseases.
- Suppress belching leading to hiccups, chest pain, cough and loss of appetite.
- Inhibiting yawning will lead to diseases of the eyes, throat, ears and nose.
- Suppression of hunger and thirst can lead to nutritional disorders and weakness.
- The suppression of tears leads to mental confusion, chest pain, dizziness and digestive disturbances.

- Constricted breathing can lead to suffocation, breathing problems, heart disease and even death.
- Sleep inhibition causes diseases such as insomnia, mental disorders, digestive disorders and sensory diseases. Needs that can be suppressed.
- Cravings for greed, grief, fear, rage, pride, evil, envy, and excessive passion must be quelled.
- Observe self-control and always tell the truth. One should not harm others and should always act with courtesy and courtesy.
- Bad eating habits and behaviours must be given up and good things must be resumed gradually. An intelligent person looking for happiness should put a lot of effort into keeping a good relationship and avoiding the bad.

Achara Rasayana⁸

Purity is priceless, but everything can be bought there." it is a code of conduct that should be practiced to lead a healthy and disease-free life. One who adopts such manners will enjoy all the benefits of Rasayana therapy without spending any ingredients on Rasayana methods or recipes. Although the nature of Achara Rasayana is mentioned in most of the Ayurvedic classics, in the Charak Samhita it is described precisely and in detail in chapter 1 of Chikitsa Sthana (verses 30-35). Achara Rasayana has the ability to produce enormous beneficial effects of Rasayana including the following acts:

- Truth (Truth and Honesty)
- Avoid anger
- Abstain from alcohol - indulgence
- Abstain from excessive sex - frigidity
- Nonviolence
- No burnout/excessive exertion
- Calm
- Pleasant speech
- Commitment to mantra and cleanliness
- Patience
- Charity
- Penance
- Participating in making offerings to gods, cows, Brahmins, teachers, gurus and elders
- Lack of cruelty
- Compassion / mercy
- Wake up and sleep properly Milk and dairy habits (healthy diet)
- Good knowledge of place, time and tactics
- Giving up the ego

- Good behaviour
- Narrow heart
- Involvement of sensory organs in spiritual matters (spiritual temperament)
- Engage in worship of elders, theists, and self-directed people. Engage in the study of religious scriptures.

II. MATERIAL AND METHOD

- Ayurvedic literature.
- Epidemiological data from WHO.
- Review articles from Ayurveda on NCDs and its risk factors.
- Articles related to lifestyle management in NCDs according to Ayurveda.

Literary review from various research article from Ayurveda and modern texts, previous studies. Epidemiological data, updated information on internet will be analysed, assessed and evaluated.

III. RESULT

According to more than a few scientific articles on NCDs sharing pathology (samprapti) like Prameha, medoroga, Ama, Santarpanjaniya vyadhi. According to Ayurveda ama is root motive of all metabolic and degenerative illnesses caused due to Agnimandya considering that it blocks strotas of micro-channel that nourishes tissue. Ama is believed to have anti genetic and pre inflammatory property. NCDs more often occur due to inappropriate dietary dependancy and sedentary existence style. As we all recognize prevention is higher than cure, to keep away from Non communicable illnesses lifestyles fashion amendment is given in phrases of Dincharya (daily regimen) Ritucharya (seasonal regimen) these two can be elaborated usually by two components of Aahar (diet management) and vihar (physical exercising and stress management).

In Charak sutra sthan signs and symptoms of bahudosha resemble to metabolic syndrome. And cure of this aggravated doshas is via langhana (lightning) and pachan (digestion). By following thinking of Aahar, viruddhahara this can be achieved.

All problems in community are due to the fact that activities no longer being accompanied like consuming at irregular time, irregular sound as sleep. In order to preserve fitness acharyas have especially stated the movements that has to be followed. The good ethics (Sadvritta, Aachar rasayana) are to be accompanied in order to reverse ailment process. It can be interfered as a Ayurvedic

way of life change that can assist combat in opposition to NCDs.

IV. DISCUSSION

Ayurvedic health care focuses on the prevention of health and well-being of the individual as a whole, and as a member of society, which is exactly in accordance with the principles of community medicine reflecting primordial prevention. Following a healthy regimen in daily routine is one of the keys for good health. The way of living should be managed despite a hectic routine to lead a healthy life which are stated in Ayurveda.

V. CONCLUSION

Efforts made at Central by Government of India and at state level have not been much able to check rising burden of NCDs due to limited measurement scales. There is an urgency to focus on promotion and prevention of these diseases and their risk factors. Ayurveda, an ancient Indian healing science helps in prevention of NCDs.

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