

## SCREENING, PREVENTION, CONTROL, AND MANAGEMENT OF NON-COMMUNICABLE DISEASES

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Article Received on 02/07/2025

Article Revised on 23/07/2025

Article Accepted on 13/08/2025

## ABSTRACT

A Non-Communicable disease (NCD) is a disease that is not Transmissible directly from one Person to Another. It is defined as a disease of long duration, generally having slow Progression. A combination of genetic, lifestyle, physiological, and environmental factors can cause non-communicable diseases, According to WHO Four main types of NCDs are Diabetes, Cardiovascular disease, cancer, and respiratory diseases. They are diseases of long duration targeting Men, Women, and Children, and people in all income groups. NCDs are the leading cause of death globally. In India, Non-Communicable diseases (NCDs) contribute to 60% of all deaths. The four Major causes of NCD death are; Coronary Heart disease, Stroke, HTN (45%), Coronary Respiratory diseases (22%), Cancer (12%), and Diabetes (3%). Manage Risk factors of non-communicable diseases and lifestyle disorders in the form of proper management, the advice of daily and Seasonal regimen (*Dincharya and Ritucharaya*), Some detoxification procedures (*Shodhankarma*), Proper diet (*Aahar*), Exercise (*Vihar*), Medication (*Aushadha*) and Rejuvenation Therapies (*Rasayan*). *Ayurveda* describes three pillars for healthy life i.e., *Aahar, Nidra, and Brahmacharya*. It affects the physical, mental ethical, social, and spiritual well-being.

## INTRODUCTION

According to *Ayurvedic Samhitas Santarpanjanya Viyadhi* can be correlated with Non-Communicable diseases.

प्रेमहपिडकाकोठकण्डूपाण्ड्वामयज्वराः ॥५॥

तन्द्रा क्लैब्यमतिस्थौल्यमालस्यं गुरुगात्रता ॥६॥

कुष्ठान्यामप्रदोषाश्च मूत्रकृच्छ्रमरोचकः ।

इन्द्रियस्त्रोतसां लेपो बुद्धेर्मोहः प्रमीलकः ।

शोफाश्चैवंविधाश्चान्ये

शीघ्रमप्रतिकुर्वतः

॥७॥(ch.su.23/5,6,7)

or Cause Chronic Symptoms requiring long-term care and control while others progress rapidly.

## CAUSES &amp; RISK FACTORS

संतर्पयति यः स्निग्धैर्मधुरैर्गुरुपिच्छिलैः ।

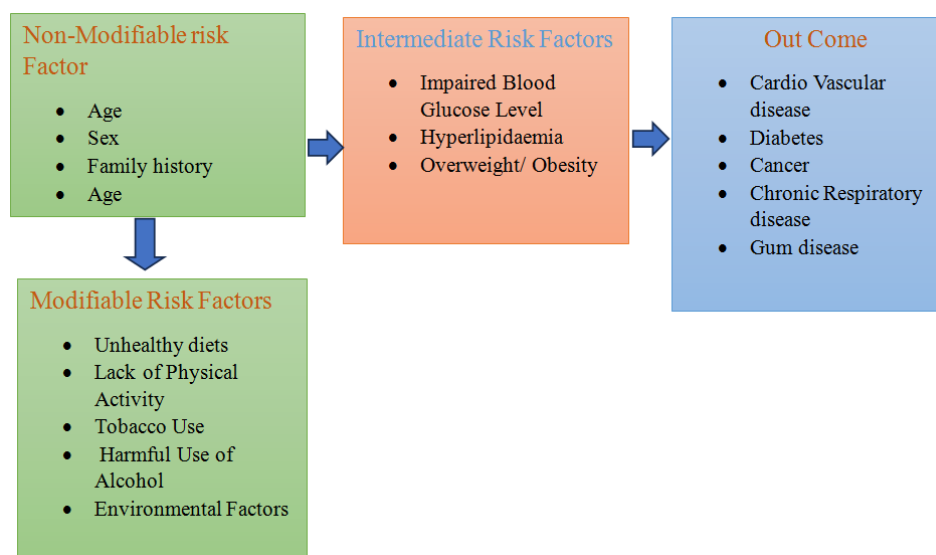
नवान्नैर्नवमद्यैश्च मांसैश्चानूपवारिजैः ॥ ३ ॥ ।।

गोरसैर्गौडिकैश्चान्नैः पैष्टिकैश्चातिमात्रशः ।

चेष्टाद्वेषी दिवास्वप्नशय्यासनसुखे रतः ॥४॥

रोगास्तस्योपजायन्ते सन्तर्पणनिमित्तजाः ।(ch.su.23/3,4)

Non-communicable diseases (NCDs), also known as Chronic diseases, do not spread from person to person. These illnesses take a long time to develop and do not Present Symptoms in the early stage. They require treatment for several years, and some require lifelong treatment. The main types of non-communicable diseases are Diabetes, Coronary Heart disease, Cancer, and Respiratory disease. They are diseases of long Duration targeting Men, Women, and Children, and people in all income groups. Some of these diseases Progress Slowly



### Are Non-Communicable Disease Increasing

- People Shifting from rural areas to urban areas and making changes in lifestyle related to diet, exercise & Other behaviors.
- Decrease in Physical activity due to availability due to availability of Vehicles for transport.
- Availability and use of tobacco and Alcohol for all age groups.
- Low consumption of fruits and vegetables because of high costs/ lower availability.
- Increase consumption of refined & Packaged foods.
- Growing environmental pollutions( Air, Food, Water)

### Sign & Symptoms

#### *Sthoulya* (Obesity)

(<https://www.clinic> Barcelona)

- Difficulty in sleeping
- Excessive sweating
- Intolerance to heat
- Fatigue
- Depression
- Feeling of shortness of breath( Dyspnoea)
- Infection in skin folds
- Stretch Marks
- Swelling and Varicose Vein in the lower limbs.

#### Hypertension

(World health Organization) <https://www.who>.

- Severe Headache
- Nausea
- Difficulty Breathing
- Vomiting
- Anxiety
- Confusion
- Blurred Vision
- Abnormal Heart rythm

#### Diabetes

National Institute of health (.gov) <https://www.niddk.nih.gov>

- Polydipsia
- Polyphagia
- Polyurea
- Fatigue
- Blurred vision
- Numbness or tingling in the feet or hands
- Sores that do not heal

#### COPD

<https://en.m.wikipedia>

- Cough
- Shortness of breath
- Wheezing
- Chest tightness
- Tiredness constant
- Anxiety

### Screening of Non-Communicable disease

तस्मादातुरं परीक्षेत प्रकृतितश्च, विकृतितश्च सारतश्च, संहननतश्च, प्रमाणतश्च सात्म्यतश्च, सत्त्वतश्च, आहारशक्तितश्च, व्यायामशक्तितश्च, वयस्तश्चेति, बलप्रमाणविशेषग्रहणहेतोः ॥ ( Ch.Vi. 8/94)

According to *Acharya Charaka* Screening of Non Communicable Diseases Can be done by *Dashvidh Parikshya Bhavas* Mentioned in *Viman Sthan*. Along with this *Trividh, Chatuvidh, Shadvidh, & Astvidh Pariksha* is also given in *Ayurvedic Samhitas*.

(Ministry of health & family welfare Government of

India)

Screening is a process of Identifying a disease condition among apparently healthy Individuals, who may be at increased risk of a disease or condition. Screening Programs can be Undertaken for a Population at large, or targeting high-risk groups.

### 1. Estimating the load of screening

#### Target population(For screening)

- All Men & Women – 30 years of age and above Hypertension and D.M.
- All Women – 30 year of age & above for cervical & Breast cancer.

### 2. Setting up the site of Screening

- On a fixed day in a week you will undertake Screening. The site of screening can be either the village itself or at the center (If the sub-center is near).
- Screening of the common NCDs should be undertaken at a place that is easily accessible to all the members of the community, particularly women, the poorest, and other vulnerable groups & for the larger population.
- Screening should be conducted on a site where privacy is assured especially in the case of women.

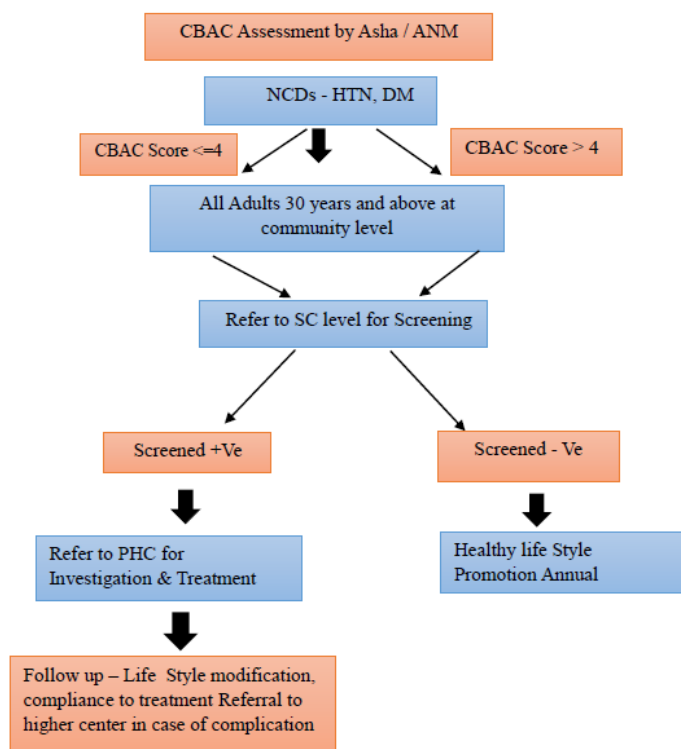
### Method & Frequency of Screening

Types of NCDs	Age of beneficiary	Methods of screening	Frequency of screening
Hypertension	30 years and above	B.P apparatus digital or Aneroid Sphygmomanometer	Once a year
Diabetes	30 years and above	Glucometer	Once a year
Obesity	30 years and above	BMI	Once a year

### Equipment required for screening

- For measurement of blood pressure you will require a B.P apparatus.
- For measuring blood glucose you will require a glucometer.
- For screening of oral & breast cancer you will be required to be skilled in visual examination.
- In the case of oral cavity you will use wooden blades & a torch.
- For the breast examination you will only need to use your hands.
- You may need to carry a “field kit”
- You may need to carry a “field kit ’when conducting outcome sessions or visiting remote areas. A “Field kit” will contain a BP apparatus, Glucometer, Wooden blades/ Mouth mirror, Measuring tape, Gloves, Torch, Cotton & Sprit swabs.

### Flow chart showing Process of screening & Referral



**Prevention of Non-Communicable diseases**

- Following *Dincharya* by making suitable changes in the *Aahar* and *Vihar*.
- *Rituanusar Shodhankarma* (Purification).
- *Triyaupasthamba*
- *Rasayana* for a long and healthy life (*Aacharrasayana*)
- *Sadvrita* (Good code of conduct)
- *Vajikarana*
- Lifestyle disorders are the main groups of disorders that occur in the individual due to non-following of daily activities.

**According to Modern – (WHO, UN)****Global level**

- Design national Policies & Plans
- Support & encourage research for NCDs Prevention & Control
- Monitor NCDs
- Support National & international Partnerships for NCD Prevention & Control

**Country level**

- Improve budgetary allocations to Support Primary health care System
- Engaging Nongovernmental Organizations, research institutions & Private Sector in Collaborative Partnerships for Implementation of an action Plan against NCDs
- Develop Countries quality improvement system focus on primary health care for prevention & Management of NCDs.

**Society level**

- Offer Healthy food in the workplace
- Offer Opportunities for Physical activity in the workplace for all the ages.
- Offer new resources from health related Non-Governmental Organizations to Support the services for the Prevention & Control,

**Individual level**

- Follow a healthy lifestyle

**Management**

<b>AHAAR</b>	<b>VIHAAAR</b>	<b>AUSHADHA</b>
<p><i>Acharya Charaka</i> described <i>tryopstambha</i> (3 subpillers of life) i.e. <i>Ahaar</i>, <i>Nidra</i>, <i>Brahmacharya</i>. In the 3 subpillers, <i>ahar</i> is mentioned first, thus showing its importance. Daily consumption of <i>hita</i>, <i>aviruddha</i>, <i>satmya</i>, and <i>nitya sevniya ahaar</i> makes the person disease-free. <i>Acharyas</i> mentioned so many rules and regulations for diet and dietary habits. importance of <i>pathya ahaar</i> is mentioned as <i>mahabhaishajya</i>,</p> <p><b>भेषजेनोपपन्नोऽपि निराहारो न शक्यते । तस्मादिभषग्मिराहारो महाभैषज्यमुच्यते ॥</b> (Kashyap khil 4/6)</p>	<p>It is advisable to wake up during <i>Brahma Muhurta</i>. This is the best time to study and to practice Yoga.</p> <p>Oil massage ensures softness and unctuousness of skin, free movements of joints and muscles nourishment, improves peripheral circulation, and eliminates metabolic wastes.</p> <p>Regular exercise builds stamina and resistance against disease, clears the channels of the body and increases the blood circulation and efficiency of vital organs, promotes appetite and digestion, and prevents disease.</p>	<p><i>Vaman</i>, <i>Virechana</i>, <i>Raktamokshana</i>, <i>Vyayam</i>, <i>upwas</i>, <i>Dhoompan</i>, <i>Swedana karma</i> is to be done. Use of <i>Haritaki Churna</i> with <i>Madhu</i> is indicated along with <i>Ruksha Anna</i>. External application of <i>Churna</i> and <i>Lepas</i> as mentioned in <i>Aragwadhiya Adhyaya</i> of <i>Sutrasthana</i> of <i>Charaka Samhita</i>. Some Yoga are as follows-</p> <p><i>Triphaladi Kwatha</i>, <i>Mustadi Kwatha</i>, <i>Kushthadi churn</i>, <i>Triushnadi Mantha</i>, <i>Vyoshadhya Saktu</i></p>

**CONCLUSION**

Now a days due to modernization, the changes in lifestyle are observed and the day to day regimen as prescribed in *Ayurveda* could not be followed properly. So, the human beings are suffering from various non communicable diseases. The main objective of *Ayurveda* is to "Maintain the health of a healthy individual by prevention of disease and to cure the diseased ones *Ayurveda* being the foremost life science describes ways to prevent and manage lifestyle disorders. It provides proper dietary management and lifestyle advices through *Dincharya* (daily regimen), *Ritucarya* (seasonal regimen), *Panchkarma* (Bio purification therapies) and *Rasayana* (rejuvenation) therapies. The *Sadvrita* (ideal routines) and *Aachara Rasayana* (code of conduct) are of

utmost importance to maintain a healthy and happy sociopsychological wellbeing of a person. The above facts emphasize the importance of the *Ayurvedic* principles for various lifestyle disorders including the NCD's. so *Ayurveda* principles most important for controlling NCDs.

**REFERENCES**

1. Mohini Gupta et al. Role of *Ayurveda* in the management of Non communicable Disease.
2. WHO. Noncommunicable diseases: *Key facts*. World Health Organization, 2023.
3. WHO. Global status report on noncommunicable diseases. Geneva: World Health Organization, 2014.
4. WHO. NCD mortality and morbidity. Geneva:

- World Health Organization, 2022.
5. Ministry of Health and Family Welfare, Government of India Health Profile 2022 National.
  6. ICMR, PHFI & IHME. India: Health of the Nation's States – The India State-Level Disease Burden Initiative. New Delhi, 2017.
  7. *Charaka Samhita, Sutrasthana*, Chapter 5 – *Dincharya Vidhi*; *Sushruta Samhita, Sutrasthana*, Chapter 24 – *Ritucharya*.
  8. *Ashtanga Hridaya, Sutrasthana*, Chapter 7 – *Trayopasthambha Vijnaniya Adhyaya*.
  9. *Charaka Samhita, Sutrasthana*, Chapter 23, Verses 5–7 – Description of *Santarpanajanya Vyadhis*.
  10. WHO. Noncommunicable Diseases: *Key Facts*. Geneva: World Health Organization, 2023.
  11. Ministry of Health and Family Welfare. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). Government of India, 2022.
  12. ICMR & PHFI. India: Health of the Nation's States – Disease Burden Initiative. New Delhi: Indian Council of Medical Research, 2017.
  13. Sharma, P. V., trans. *Charaka Samhita: Sutrasthana*. Vol. 1. Varanasi: Chaukhambha Orientalia, 1981. Chapter 23, Verses 3–4.
  14. WHO – Ministry of health.
  15. <https://www.clinicbarcelona.org>
  16. World Health Organization <https://www.who.int>
  17. <https://www.niddk.nih.gov>
  18. <https://en.m.wikipedia.org>
  19. *Charaka Samhita, Vimana Sthana*, Chapter 8, Verse 94 – Guidelines for *Dashavidha Pariksha* (Tenfold Examination).
  20. *Ashtanga Hridaya, Sutrasthana*, Chapter 2 – Description of *Trividha*, *Shadvidha*, and *Ashtavidha Pariksha*.
  21. WHO. Package of Essential Noncommunicable Disease Interventions (PEN) for Primary Health Care in Low-Resource Settings. Geneva: World Health Organization, 2010.
  22. Ministry of Health and Family Welfare, Government of India. Operational Guidelines: Prevention, Screening and Control of Common Non-Communicable Diseases: Hypertension, Diabetes and Common Cancers (Oral, Breast, Cervical). New Delhi: MoHFW, 2016.
  23. *Charaka Samhita, Sutrasthana*, Chapter 5 – Description of *Dinacharya* (daily regimen).
  24. *Ashtanga Hridaya, Sutrasthana*, Chapter 3 – *Ritucharya* and seasonal purification methods.
  25. *Charaka Samhita, Sutrasthana*, Chapter 11 – *Trayopasthambha: The Three Pillars of Life*.
  26. *Charaka Samhita, Chikitsa Sthana*, Chapter 1 – *Rasayana Chikitsa* and *Aachara Rasayana*.
  27. *Sushruta Samhita, Sutrasthana*, Chapter 35 – *Sadvritta Lakshana* (ethical lifestyle).
  28. *Charaka Samhita, Chikitsa Sthana*, Chapter 2 – *Vajikarana Chikitsa*.
  29. Ministry of Health and Family Welfare. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). Government of India, 2020.
  30. *Charaka Samhita, Sutrasthana*, Chapter 11 – Description of *Tryopasthambha* (*Ahara*, *Nidra*, *Brahmacharya*).
  31. *Kashyapa Samhita, Khila Sthana*, Chapter 4, Verse 6 – Importance of *Pathya Ahara* as *Mahabhaishajya*.
  32. *Ashtanga Hridaya, Sutrasthana*, Chapter 2 – *Dinacharya* (Daily Regimen) and Benefits of *Abhyanga*.
  33. *Charaka Samhita, Sutrasthana*, Chapter 5 – Guidelines for *Ritu Shodhana* and daily purificatory therapies.
  34. *Charaka Samhita, Sutrasthana, Aragvadhadi Adhyaya* – External and internal formulations for detoxification and skin disorders.