

## **Ayurveda in Public Health w.s.r. Non Communicable Diseases and Life Style Disorder**

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### **Abstract**

As per WHO - Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity<sup>1</sup>. Public health is "The science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals<sup>2</sup>.

The main aim of Ayurvedic science is to maintain the health of healthy individuals and cure the diseased one<sup>3</sup>.

As Ayurveda is recognized as foremost life science and describes ways to prevent and manage lifestyle disorders, the world is being attracted towards its potential. Ayurveda provides better solution in the forms of proper dietary management, lifestyle advises, Panchakarma like detoxification and bio-purification procedures, medicaments, and rejuvenation therapies.

The holistic approach of Ayurveda, treating the patient as a whole, meaning intervention targeted toward complete physical, psychological, and spiritual well-being makes this science a wonderful option in lifestyle disorders.

This conceptual study carried out to highlight the importance of the Ayurvedic principles and implementing in the day to day life to keep away from the various NCD & LSD.

**Keywords** Ayurveda, LSD, NCD, *Panchakarma*, Public health, WHO



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## INTRODUCTION

Public health incorporates the interdisciplinary approaches

of epidemiology, biostatistics and health services.

- Environmental health.
- Community health.
- Behavioral health.
- Health economics.
- Public policy.
- Insurance medicine and occupational health.
- The focus of public health intervention is to improve health and quality of life through
  - ✚ The prevention and treatment of disease and
  - ✚ Other physical and mental health conditions,
  - ✚ Through surveillance of cases and health indicators,
  - ✚ Through the promotion of healthy behaviors.
  - ✚ Promotion of hand washing and breastfeeding,
  - ✚ Delivery of vaccinations, and
  - ✚ Distribution of condoms to control the spread of sexually transmitted diseases are examples of common public health measures.

- Modern science through improved sanitation, vaccination, and antibiotics, and medical attention has eliminated the threat of death from most infectious diseases. This means that death from lifestyle diseases like heart disease and cancer are now the primary causes of death. Everybody naturally has to die of something, but lifestyle diseases take people before their time. Too many people are dying relatively young from Heart Disease and Cancer and other lifestyle diseases in modern times.
- In India the situation is quite alarming. The disease profile is changing rapidly. The World health Organization (WHO) has identified India as one of the nations that is going to have most of the lifestyle disorders in the near future. Nowadays, not only are lifestyle disorders becoming more common, but they are also affecting younger population. Hence, the population at risk shifts from 40+ to maybe 30+ or even younger.
- Already considered the diabetes capital of the world, India now

appears headed towards gaining another dubious distinction — of becoming the lifestyle-related disease capital as well. A study conducted jointly by the All India Institute of Medical Sciences and Max Hospital shows the incidence of hypertension, obesity and heart disease is increasing at an alarming rate, especially in the young, urban population<sup>4</sup>.

- According to doctors say, a sedentary lifestyle combined with an increase in the consumption of fatty food and alcohol is to blame cases of obesity, diabetes, hypertension etc.
1. Fats & Cholesterol
  2. Prevention of heart disease
  3. Major Life Style oriented Diseases
  4. National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)
- Cardiovascular diseases (CVD) continue to be the major cause of mortality representing about 30 per cent of all deaths worldwide. Lifestyle diseases like hypertension, diabetes mellitus, dyslipidemia and overweight/obesity are the major risk

factors for the development of CVD. With rapid economic development and increasing westernization of lifestyle in the past few decades prevalence of these diseases has reached alarming proportions among Indians in the recent years.

- In recent years, India has managed to control communicable diseases like malaria, cholera and polio. However, the nation now has to deal with a new breed of developed world obesity-fuelled diseases like diabetes and cardiovascular ailments. Coupled with a sedentary urban lifestyle, increased alcohol consumption and smoking, the urban youth are particularly prone to the aforementioned lifestyle diseases.
- A non-communicable disease, or NCD<sup>6</sup>, is a medical condition or disease which by definition is non-infectious and non-transmissible among people. NCDs may be chronic diseases of long duration and slow progression, or they may result in more rapid death such as some types of sudden stroke. They include autoimmune diseases, heart disease,

stroke, most cancers, asthma, diabetes, chronic kidney disease, osteoporosis, Alzheimer's disease, cataracts, and more. While sometimes (incorrectly) referred to as synonymous with "chronic diseases".

- The World Health Organization (WHO) reports NCDs to be by far the leading cause of death in the world, representing over 60% of all deaths. Out of the 36 million people who died from NCDs in 2005, half were under age 70 and half were women. Of the 57 million global deaths in 2008, 36 million were due to NCDs<sup>7</sup>.
- Risk factors such as a person's background; lifestyle and environment are known to increase the likelihood of certain non-communicable diseases. They include age, gender, genetics, exposure to air pollution, and behaviour such as smoking, unhealthy diet and physical inactivity which can lead to hypertension and obesity, in turn leading to increased risk of many NCDs.
- Referred to as a "lifestyle" disease, because the majority of these diseases are preventable illnesses, the most common causes for non-communicable diseases (NCD) include tobacco use (smoking), alcohol abuse, poor diets (high consumption of sugar, salt, saturated fats, and trans fatty acids) and physical inactivity. Currently, NCD kills 36 million people a year, a number that by some estimates is expected to rise by 17–24% within the next decade.
- Diet and lifestyle are major factors thought to influence susceptibility to many diseases. Drug abuse, tobacco smoking, and alcohol drinking, as well as a lack of exercise may also increase the risk of developing certain diseases, especially later in life.
- The incidence of lifestyle diseases like hypertension, diabetes mellitus, dyslipidemia, and overweight/obesity associated with cardiovascular diseases is high on the rise.
- Cardio vascular disorders continue to be the major cause of mortality

representing about 30% of all deaths worldwide. With rapid economic development and increasing westernization of lifestyle in the past few decades, prevalence of these diseases has reached alarming proportions among Indians in the recent years.

### **ROLE OF AYURVEDA FOR THE PREVENTION OF THE NCD**

Main aim of Ayurvedic science is to maintain the health of healthy individuals and cure the diseased one.

- These can be prevented well by following the principle of Ayurveda. The main principles explained in Ayurveda to counteract these are as follows:
- Concept of pathya and apathya<sup>8</sup>- do and don'ts: The Ayurvedic classics explained the unique concept of the do and don'ts as per different seasons and different ailments. The one great scholar of middle century explained the importance of following the do's and don'ts of food article as follows-

- As Ayurveda is recognized as foremost life science and describes ways to prevent and manage lifestyle disorders, the world is being attracted towards its potential. Ayurveda provides better solution in the forms of proper dietary management, lifestyle advises, *Panchakarma* like detoxification and bio-purification procedures, medicaments, and rejuvenation therapies.
- The holistic approach of Ayurveda, treating the patient as a whole, meaning intervention targeted toward complete physical, psychological, and spiritual well-being makes this science a wonderful option in lifestyle disorders.
- Basically, a particular lifestyle of person is a cumulative product of his/her physical capacity coordinated with psychological functioning, displayed in the form of habits, behavior, dietary and living pattern based on his own training sought from childhood, and mimics he gained from his immediate companions including parents, siblings, peers, etc.

- Thus, it involves a pure psychological and innate control over the physical and sensory activities.
- When this initiation, control, and co-ordination are disturbed, it leads to the derangement of lifestyle and results in any lifestyle disorder. Ayurveda narrated this phenomenon as ‘*Prajnaparadha*’ (intellectual blasphemy) which is one of the three basic causes of any disease. There are ample improper actions as an impact of *Prajnaparadha* which are root causes of various diseases, e.g., habit of suppression of any natural urge is a result of *Prajnaparadha* and enlisted as a cause of nearly 50% of the diseases.
- Reversal of any neurotransmission or improper removal of the waste products formed during metabolism leading to accumulation of toxins is the basic cause of a disease. Therefore, the habit of suppression of urge in improper lifestyle can be considered as one of the root causes of lifestyle diseases.
- Removal of these accumulated waste products is the first line of treatment as described in Ayurveda by Charaka as well as in Naturopathy by Hippocrates, Henry Lindlarh, and Mahatma Gandhi.
- In the management of lifestyle diseases, Ayurveda offers various regimens including *Dinacharya*<sup>9</sup>(daily regimen), *Ritucharya* (seasonal regimen), *Panchakarma* (five detoxification and bio-purification therapies), and *Rasayana* (rejuvenation) therapies. The *Sadvritta* (ideal routines) and *Aachara Rasayana* (code of conduct) are utmost important to maintain a healthy and happy psychological perspective.
- The inclusive utilization of all these treatment modalities has a great effect on lifestyle disorders. Moreover, the application of organ-specific *Rasayana*<sup>10</sup> herbs also provides enough scope not only for prevention of disease, but also for the promotion of health and cure of disease too. Cardio-vascular disorders are discussed under *Hridroga* in Ayurveda. *Hridaya* has been referred to be the site of psyche.

- Any kind of psychological disturbance will lead to a disturbed patho-physiology of heart. Hence, it has been told to protect the heart from every kind of stressor (*Pariharya Visheshena Manaso Dukkahetavah*).
- On the contrary, conventional western medicine deals with the cardio-vascular disorder with single side of somatic disorder. Hence, Ayurveda has an upper edge in treating the disease with emphasis on its root cause. The Ayurvedic physician concentrates on achieving the objective of Ayurveda for promotion of health, prevention and management of disease for a healthy and happy life in the ailing society.
- The present issue of AYU comprises variety of research articles in Ayurveda. Out of the total of 23 articles, the first 4 are review articles exploring hidden messages of Ayurveda in modern language. This is followed by 9 clinical research articles and 1 case study.
- The drug research section includes 3 articles on pharmaceutical standardization and 4 on pharmacological researches. The issue is concluded with 2 short communications. We hope this issue will provide ample information to the learned society.
- Emphasizing the need to spread awareness to tackle these deadly diseases, Dr Kumeran at Obesity Foundation India said, 'Parents should be aware and should be responsible to guide their children to eat the right kind of food and engage them in physical activities. Also more emphasis should be laid on engaging kids in outdoor activities.'
- Following Din- charya by making suitable change in the Aahara and Vihaara.
- Following Rutu-charya including Rutu Anusaar Shodhana<sup>11</sup>.
- Non suppression of natural urges<sup>12</sup>.
- Rasayana including Aachara Rasayana.
- Following Sadvritta<sup>13</sup>.
- Vaajikarana<sup>14</sup>.
- Life style disorder 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 the science of LIFE which explains the individual how to maintain the health and lead a socially useful life, have positive long life.
- The concept of Aachara-rasayana is beautifully explained in Ayurveda merely enough to uproot the LSD.
- CVD – cardiovascular disease are considered to be the major burden on nations worldwide. The mortality and morbidity is unpredictable. Due to the unhealthy diet and unwholesome life style premature ageing changes such as Artherosclerosis in the major coronary arteries leads to sudden and unexpected death. The regimen explained in the Ayurveda – such as shodhana procedure is such a great concept the result of which is beyond the imagination of ordinary physician.
- Shodhana procedure the person who undergoes repeated shodhana procedure followed by the removal or clearing of all blockages pertaining to major and minor blood

vessels as well major channel of the body. By undergoing shodhana the whole of the GIT tract will be cleared without causing the much harm to the normal friendly intestinal bacteria which is expected to happen if the contemporary science medicines are not used with caution.

Thus, by above said references it can be concluded that Ayurveda has holistic approach not only for the single individual for the entire community. Hence by following the rule of conduct and regimen explained in Ayurveda one can keeps away the disease free body, mind and soul.

Ayurveda is an evidenced based and time tested nectar of knowledge for the well being of the entire community and society.

## REFERENCES

1. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health

- Organization, no. 2, p. 100) and entered into force on 7 April 1948.
2. Wikipedia -  
[http://en.wikipedia.org/wiki/Public\\_health](http://en.wikipedia.org/wiki/Public_health).
  3. Charaka Samhita, Sootra Sthana, 1<sup>st</sup> Chapter.
  4. Wikipedia -  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3843306/>.
  5. Wikipedia -  
<http://health.bih.nic.in/Docs/Guidelines/Guidelines-NPCDCS.pdf>.
  6. Wikipedia -  
[http://en.wikipedia.org/wiki/Non-communicable\\_disease](http://en.wikipedia.org/wiki/Non-communicable_disease).
  7. Wikipedia -  
[http://en.wikipedia.org/wiki/Non-communicable\\_disease](http://en.wikipedia.org/wiki/Non-communicable_disease).
  8. Charaka Samhita, Sootra Sthana 25<sup>th</sup> chapter, Chaukhamba prakashan, Varanasi.
  9. Astanga Hrdayam, Sootra Sthana 2<sup>nd</sup> Chapter, Chaukhamba prakashan, Varanasi.
  10. Charaka Samhita, Chikitsa Sthana 1<sup>st</sup> chapter, Chaukhamba prakashan, Varanasi.
  11. Astanga Hrdayam, Sootra sthana 1<sup>st</sup> chapter, Chaukhamba prakashan, Varanasi.
  12. Astanga Hrdayam, Sootra sthana 4<sup>th</sup> chapter, Chaukhamba prakashan, Varanasi.
  13. Charaka Samhita, sootra sthana 7<sup>th</sup> chapter, Chaukhamba prakashan, Varanasi.
  14. Charaka Samhita, Chikitsa sthana 1<sup>st</sup> chapter, Chaukhamba prakashan, Varanasi.