

International Journal of Ayurveda and Pharma Research

Review Article

NIDANA AND MANAGEMENT OF LIFESTYLE DISORDERS

Raj Kumar Meher^{1*}, Surendra Kumar Sharma², Preeti Gavali³

*1MD Scholar, ²Professor & HOD, ³Assistant Professor, Dept. of Roga Nidana & Vikriti Vigyana, National Institute of Ayurveda, Jaipur, Rajasthan, India.

Article info	ABSTRACT
Article History:	Lifestyle disorders are the diseases linked with one's lifestyle. Nowadays, lifestyle
Received: 22-04-2022	disorders are becoming more widespread and affecting a majority of the population and
Revised: 05-05-2022	posing a huge public health threat around the world. According to the World Health
Accepted: 11-05-2022	Organization (WHO), lifestyle disorder is a subgroup of non-communicable diseases
KEYWORDS:	(NCDs) and accounts for around 71 percent of all deaths worldwide. Lifestyle disorders
Lifestyle disorder,	are caused mostly by poor diet and lack of physical activity. Distracting the people from
Hypertension,	physical exercise and their attraction towards sedentary lifestyle can lead to a variety of
Obesity, Diabetes,	health problems including chronic non-communicable diseases with life-threatening
Non-communicable	issues. Hypertension, diabetes, PCOS, cancer, arthritis, obesity, insomnia, depression are
diseases, <i>Sadvritta,</i>	the diseases which can be taken under lifestyle disorders. Ayurveda, science of life, aims in
Achaar rasayan.	fundamental goal of maintaining health of healthy people and treatment of disease in sick
	one's. To sustain a healthy and joyful life (<i>Hitaayu & Sukhaayu</i>), Ayurveda has a number of
	different principles and regimens including Ahara and Vihar (dietary habits and daily
	routine), Dinacharya (daily regimen), Ratricharya (night regimen), Ritucharya (seasonal
	regimen), Panchkarma (five detoxification and bio-purification therapies), Rasayana
	(rejuvenation), Sadvritta paalan (ideal habits) and Aachara Rasayana (code of conduct).
	Hence, lifestyle disorders can be well managed through Ayurveda by adopting its different
	principles and regimens.

INTRODUCTION

According to the World Health Organization (WHO), lifestyle disorder are a subgroup of noncommunicable diseases (NCDs) which kill around 41 million people each year, that is around 71% of all deaths globally. NCDs are usually chronic in nature and cannot be communicated from one person to another.

Lifestyle diseases are the ailments that are primarily linked with one's lifestyle. The distraction of one's from enough physical or mental activity and push them towards sedentary lifestyle either due to their habits or their busy schedule or routines. Main causes of lifestyle disorder if not managed or prevented, these can lead to life threatening consequences with time.

Access this article online				
Quick Response Code				
Marker	https://doi.org/10.47070/ijapr.v10i5.2344			
	Published by Mahadev Publications (Regd.) publication licensed under a Creative Commons Attribution-NonCommercial- ShareAlike 4.0 International (CC BY-NC-SA 4.0)			

Lifestyle diseases are becoming more common these days and affect a majority of the population. The most effective method to prevent or manage the progression of these diseases through making some simple changes in our lifestyle as described in Ayurveda. One's daily routine and lifestyle has been very well explained in Ayurvedic literature. They can be adopted and followed easily. In this review article a humble attempt has been made to mainly focus on Lifestyle disorders & their management by Ayurvedic principles.

Definition

Lifestyle diseases are defined as diseases linked with the way people live their life. These are the diseases caused by unhealthy eating, behaviour & partly by other factors.

AIM AND OBJECTIVE

- 1. To understand and identify the causative factors for Lifestyle disorder.
- 2. Prevention and management of lifestyle disorder through Ayurveda.

MATERIAL AND METHODS

This study is based on a review of data collected from various classical Ayurvedic books, modern literatures, magazines and articles & research papers from various journals. Searches for related websites have also been done.

Death Statistics in India

According to a report published by ICMR (Indian Council of Medical Research) in 2017, 3 of the 5 leading individual causes of disease burden in India were non-communicable, with ischemic heart disease and chronic obstructive pulmonary disease as the top two causes and stroke as the fifth leading cause. The range of disease burden or DALY (disabilityadjusted life year) rate among the states in 2016 was 9-fold for ischemic heart disease, 4-fold for chronic obstructive pulmonary disease and 6-fold for stroke and 4-fold for diabetes across India. Of the total death from major disease groups, 62% of all deaths were caused by non-communicable diseases.

Roga/Vyadhi

Unhealthy dietary habits, irregular sleep cycles and overdependence on technology has resulted in life style diseases. Due to lack of paying attention to our health, it happens. Here are some major lifestyle diseases i.e., respiratory illness, COPD, heart disease, PCOS, cancer, stroke, hypertension, depressionanxiety, obesity, diabetes, TB, cirrhosis of liver, alzheimer's disease

Nidana

A person's lifestyle, which includes habits and behaviours, contributes to lifestyle diseases. Eating unhealthy foods, overeating, over dependence on processed foods, energy drinks, artificial sweeteners and fast foods are the most common causes of lifestyle disorders. Sedentary living, smoking, drinking alcohol, stress, and bad sleeping habits, all of which may be traced back to so-called modern living practices, exacerbate the problem. There is still another major issue confronting the modern world. This is due to a lack of exposure to natural light and fresh air. Susceptibility to lifestyle diseases is assumed to be influenced by diet and lifestyle. The nature and duration of your work, the amount of time you spend with your loved ones, stress factors, physical activity and other factors all influence how fast you will succumb to one of the lifestyle disorders. Many of us are susceptible to a variety of diseases as a result of more work and less physical activities. Other elements such as heredity, age and gender, on the other hand, are unavoidable and uncontrollable. Drug addiction, tobacco, smoking, and alcohol consumption are among the other problems that can be avoided or controlled.

Causes in Modern Perspective

The causes of lifestyle diseases can be divided into three broad categories:

- 1. Modifiable behavioural risk factors
- 2. Non-modifiable risk factors
- 3. Metabolic risk factors.

Modifiable Risk Factors		Non-modifiable Risk Factors		M	Metabolic Risk Factors	
i.	Bad food habits	i.	Heredity	i.	Increased blood pressure	
ii.	Excessive use of alcohol	ii.	Age	ii.	Obesity	
iii.	Eating and smoking tobacco	iii.	Gender	iii.	Increased blood glucose	
iv.	Physical inactivity				levels or hyperglycaemia	
v.	Wrong body posture			iv.	Increased levels of fat in	
vi.	Sedentary living				the blood or	
vii.	Stress				hyperlipidaemia	
viii.	Bad sleeping habits					
ix.	Lack of exposure to natural light and fresh air					

Table 1: Causes in Modern Perspective

Table 2: Showing Cause/ Risk Factors of Some Lifestyle Disorder

S. no	Life style disorders	Causes/ Risk factor
1	Heart diseases like Arteriosclerosis etc	Smoking, high BP, elevated cholesterol, diabetes, obesity, physical activity
2	Cancer	Smoking, alcohol, solar radiation, ionizing radiation, work side hazardous, environmental pollution, pollution, medication, infectious agent, dietary factors.
3	Chronic liver disease /cirrhosis	Alcohol
4	Chronic obstructive pulmonary	Long term cigarette smoking, occupational dust and chemical

Int. J. Ayur. Pharma Research, 2022;10(5):98-102

	disease (COPD)	exposure, air pollution, genetics. ^[5]			
5	Diabetes	Obesity, diet, sedentary life style			
6	Stroke	High BP, elevated cholesterol, smoking.			
7	Nephritis/CRF	cholesterol, smoking, overweight or obese, diabetes, hypertension ^[6]			
8	Essential hypertension	Genetic variation, ageing, obesity, salt, alcohol, rennin, smoking, lack of physical exercise.			

Prevention

- Nidana parivarajan is to avoid the known Dosha aggravating factors or disease-causing factors in diet and lifestyle of the patient. It also encompasses the idea to refrain from precipitating or aggravating factors of the disease.
- Prevention of these NCDs are activities that aim to reduce the likelihood of a disease or disorder affecting people. Lifestyle diseases are preventable for children if parents set them on the correct path, as early life decisions and influences can impact people later on in life.
- In addition, studies have suggested that early life exercise can reduce the risk of developing metabolic diseases in adulthood.
- Lifestyle diseases can be prevented through reduction in smoking of tobacco and other substances, reducing one's intake of alcohol, processed meats, red meats (like pork, beef and lamb), fatty foods and by engaging in daily exercise.
- Health promotion and preventive health measures have been shown to be effective in reducing disease burden at lower costs than NCD therapy.
- NCD prevention and control, on the other hand, cannot be achieved just through dietary changes and increased physical activity. It necessitates action at several levels, with health-care providers and governments serving as leaders, as well as strengthened health-care systems and multistakeholder participation.
- Quality lifestyle disease intervention must be given through a primary healthcare model that prioritizes early detection and treatment.

Management

Ayurveda is the 'Science of Life' and it focuses on achieving the objective of promotion of health, prevention and management of disease for a healthy and happy life in the ailing society.

According to Ayurveda, lifestyle diseases are diseases caused by wrong "*Ahara*" and "*Vihara*" (food and regimen). Ayurvedic intervention is targeted towards complete physical, psychological and spiritual well-being, which makes it a wonderful option in treating lifestyle disorders.

In the management of lifestyle diseases, Avurveda offers various regimens including Ahara and Vihar (dietary habits & daily routine), Dincharya (daily regimen), Ratricharya (night regimen), Ritucharva (seasonal regimen), Panchkarma (five detoxification bio-purification therapies) and Rasavana and (rejuvenation) therapies, Daivavyapasraya chikitsa, Yukti vyapasraya chikitsa, Sattwavajaya chikitsa (counselling therapy). The *Sadvritta* (ideal routine) and Aachar Rasayana (code of conduct) are utmost important to maintain a healthy and happy psychological perspective.

Ahara- In Ayurveda, Ahara and Vihar are emphasised as measures for improved living, health and wellness. In Avurveda, Ahara is regarded as Prana (life's foundation). Ahara has described as one of the Travopastambha (celibacy). Diet is essential for human health since it offers essential nutrients and increases longevity. Avurveda always emphasises the importance of eating a balanced and nutritious food in order to stay healthy. *Ahita-Ahara* (unwholesome diet) encourages the manifestation of various illnesses, whereas *Hita-Ahara* (wholesome diet) promotes health and longevity. In addition, Ayurveda identified eighteen categories of dietary incompatibilities (Viruddha Ahara) that should be avoided in order to sustain health and longevity. In this way, Ayurveda also provides different *Pathayapathya* (do's and don'ts) for diet/dietary supplementation, which can aid in the prevention and management of a wide range of lifestyle disorders.

Dincharya- Ayurveda recommends starting daily habits with awareness, early rising, avoiding suppression of natural urges and eliminating wastes as needed, keeping teeth and skin clean, regular massage (*Abhyanga*), regular daily bathing (bathing increases appetite and promotes longevity) and eating a suitable and wholesome diet based on appetite and metabolic needs. Ayurveda also advises against sleeping late at night, eating state foods, having intercourse with the wrong partner and at the wrong time and place and misusing one's senses. These factors may cause an imbalance in circadian rhythms, which can lead to lifestyle disorders over time. As a result, in order to maintain health, build immunity, and avoid lifestyle disorders, one must be conscious of this daily regimen.

Ritucharya- Ritucharya is a crucial component in the prevention of a variety of illnesses, including lifestyle disorders. Ayurveda advises seasonal *Panchakarma* i.e., *Basti* in *Varsha Ritu* (Brahmanand Tripathi, 2015), *Vaman* in *Vasant Ritu* (Brahmanand Tripathi, 2015) and *Virechana* in *Sharad Ritu* (Brahmanand Tripathi, 2015) as preventive measures for maintaining and promoting physical and mental health.

Panchakarma Therapy- Panchakarma is a name that refers to the five main bio-purification procedures: Vaman (therapeutic emesis), Virechana (therapeutic purgation), Basti (therapeutic decoction & oil enema). Nashva (nasal medicine), and Raktamokshan (bloodletting). These procedures are used to cleanse the body channels, eliminate toxins from the body, and bring about bio-humour harmony (Tridosha i.e., Vata, Pitta, Kapha, and Manasa Dosha i.e. Raja and Tama) in order to obtain long-term beneficial effects that lead to chemical balance inside the bio-system and thus provide the normal chemical and electrical environment in the brain, restoring homeostasis. Panchakarma focuses on the preventative rather than the curative aspects of treatment. It also improves mental health by lowering stress levels and so preventing lifestyle illnesses.

Rasayan Therapy- Ayurveda proposes a separate idea of medicinal dietary supplements in the contexts of *Rasayana*, in addition to food and nutrition (rejuvenative measures). *Rasayanas* nourish and rejuvenate the body by boosting *Agni bala*, acting as direct nutrients, and purifying the body channels through *Sroto-prasadan* (body channel purification), resulting in enhanced nutritional status and increased *Dhatus* (body tissue) quality. *Rasayana* drugs are used as immunomodulator, Adaptogenic, antioxidants, thus preventing lifestyle disorders.

Sadvritta and Achara Rasayana- Sadvritta and Achara Rasayana are two Ayurvedic codes of ethics that can be divided into three categories. 1. personal (e.g., limited sexual relations, early sleeping and waking, avoid excessive exertion, avoid suppression of natural urges, bathing regime, keeping skin clean), 2. social (e.g., have mercy on others, tell the truth, avoid alcoholism, be soft-hearted, always use clean and washed cloths), 3. psychological and emotional (e.g. try to be in a steady mental state i.e., avoid to memorize if being insulted by anyone, keep patience, etc). Such lifestyle changes are always beneficial in the prevention and treatment of a variety of lifestyle disorders.

Daivavyapashraya Chikitsa- Chanting Mantras, Aushadhi and Mani Dharana (spiritual usage of herbs and gems), Mangal Karma (propitiatory), Bali (offering oblations), Homa/Yangya, Prayashchita (ceremonial penances), Upavasa (fasting), Swastyayana (social well-being rituals) and so on are all part of *Daivavyapashraya Chikitsa*. These techniques are important for stress management, as well as the prevention and treatment of lifestyle problems.

Satvavajaya Chikitsa: According to *Acharya Charaka*, it is a means of stopping the mind from desiring unwholesome objects. All of these techniques aid in the development of mental control over the *Manas* or mind which is typically unsteady.

Some common lifestyle disorders and the medicinesregimen followed for management of these diseases are as follows:

1. Management of Obesity

- a. Therapy: Udvartanam (powder massage)
- b. **Medicines:** Varunadi kashayam, Navaka guggulu, Triphala churnam, Ayaskrithi
- c. **Regimen:** Avoid day sleep, take timely food, relax the mind & distress and follow the seasonal regimen.

2. Management of Diabetes

- a. Panchakarma: Kashaya Vasthi (Decoction Enema)
- b. Powder massage with *Triphala churnam* and *Nalpalmaradi churnam*
- c. **Medicine:** Nishamalaki churnam, Chandraprabha vati, Ayaskrithi, Nishakatakadi kashayam
- d. **Regimen:** Eat healthy plant foods, control weight, don't smoke, be more physically active or get regular exercise.
- 3. Management of Hypertension and Cardiovascular diseases
 - a. **Therapy:** *Shirodhara* with *Ksheerabala thailam, Shiropichu* with *Bala thailam* and *Amla* paste.
- b. **Medicine:** Sarpagandha churnam, Arjunarishtam, Brahmi vati, Ksheera bala thailam, Lasunadi vati
- c. **Regimen:** Keep your cholesterol and triglyceride levels under control, eat a healthy diet, get regular exercise, limit alcohol, don't smoke, get good quality sleep, manage stress.

The Therapeutic efficacy of various Herbal drugs in treating the Life style disorders are detailed below :

- 1. **Obesity and Dyslipidemia-** *Guggulu, Lasuna, Vrikshmla* and *Kulatha*
- 2. **Prediabetic and Diabetics-** Meshasringi, Ekanayaka, Amalaki, Haridra, Jambu, Khadira, Kathaka and Shilajith
- 3. Cardiac ailments- Arjuna, Pushkaramula, Lasuna, Dasamoola and Vidari
- 4. **Sleep disorders & Stress -** Aswagandha, Jatamanji, Somalatha and Sarpagandha
- 5. Bone and Joint disorders- Vajravalli, Guggulu, Ashtavarga, Lasuna & Masha
- 6. **Uterine Disorders-** Non-Hormonal drugs like *Asoka, Lodhra, Kumari, Jeeraka, Sathavari* and *Tila*

- 7. Auto Immune Diseases- Guduchi, Bhunimba, Nimba, Haridra, Ashtavarga and Sathavari.
- 8. **Disorders of GIT (which results from unsuitable dietary regimen)-** *Shatphala, Hingu, Jeeraka, Panchalavana, Dadima* and *Triphala.*
- 9. **Disorders of respiratory tract-** Vasa, Kanaka, Dasamula, Trikatu, Amruta, Ela, Thaleesa and Lavanga.
- 10. **Neurological disorders-** Bala, Vacha, Jatamanji, Kapikachu, Aswagandha, Rudraksha, Somalatha, Brahmi and Sarpagandha.

CONCLUSION

We are now aware that lifestyle diseases are caused in part by people's daily habits (sedentary lifestyles, lack of physical activity, etc.) and in part by their unhealthy behaviours (exposure to tobacco, smoke or harmful use of alcohol, drugs, etc.). Chronic diseases are the result of our unhealthy daily habits or behavioural choices and are thus preventable. Identification of the causes of lifestyle diseases is critical since eliminating these factors will aid in healing and improved health.

This review articles provide significant information regarding various regimens described in Ayurveda. *Rasayana* drugs as well as therapies, *Panchakarma* therapy, *Pathyaapathya Ahar* and *Nidan Parivarjan* etc. provide significant contribution as treatment components of Ayurveda for curing various diseases including lifestyle disorder, prevent progression of diseases and also for maintaining healthy life both physiological and psychological aspect.

We feel that it is necessary to raise public awareness about the benefits of living a healthy lifestyle. We believe that all stakeholders, including health experts, the government, the media and others should continue to communicate regularly to the public on the importance of being healthy. So that people can adopt healthier habits.

We hope that this article inspires our readers to adopt healthy choices in order to reduce their chances of having a lifestyle disease later in life.

REFERENCES

- 1. Ashtang Hriday su.Ch.2/10 Dr. Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan. Reprint 2015, page no.30.
- 2. Charak samhita su Ch.5/3 Acharya Vidyadhar Shukla and Prof Ravidatta Tripathi, Chaukhambha Sanskrit Pratishthan. Reprint 2011, page no.81.
- 3. Ashtang Hriday su.Ch.3/45 Dr. Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan. Reprint 2015, page no.49.
- 4. Ashtang Hriday su.Ch.3/19, Dr. Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan. Reprint 2015, page no.44.
- 5. Ashtang Hriday su.Ch.3/49 Dr. Brahmanand Tripathi, Chaukhambha Sanskrit Pratishthan. Reprint 2015, page no.49.
- 6. Charak samhita Chi. Ch.1-1/7 Acharya Vidyadhar Shukla and Prof Ravidatta Tripathi, Chaukhambha Sanskrit Pratishthan. Reprint 2012, Page no.5.
- 7. Charak samhita Chi. Ch.1-4/30 Acharya Vidyadhar Shukla and Prof Ravidatta Tripathi, Chaukhambha Sanskrit Pratishthan, Reprint 2012, Page no.42.
- 8. India: Health of the Nation's States 2017 Published by ICMR. Retrieved: Jan 2020
- 9. Vallgarda, Signild (November 2011). Why the concept lifestyle diseases should be avoided. Scandinavian Journal of Public Health. 39 (7): 773–775.
- 10. Falcão-Tebas, Filippe; Kuang, Jujiao; Arceri, Chelsea; Kerris, Jarrod P.; Andrikopoulos, Sofianos; Marin, Evelyn C.; McConell, Glenn K. (1 January 2019). Four weeks of exercise early in life reprograms adult skeletal muscle insulin resistance caused by a paternal high-fat diet. The Journal of Physiology. 597 (1): 121–136.
- 11. Preventing and treating ill health (AIHW)". www.aihw.gov.au. Retrieved 2016-05-12.
- 12. http://ayush.gov.in/about-the-system/Ayurveda/ types-treatment/nidan-parivarja

Cite this article as: Raj Kumar Meher, Surendra Kumar Sharma, Preeti Gavali. Nidana and Management of Lifestyle Disorders. International Journal of Ayurveda and Pharma Research. 2022;10(5):98-102. <u>https://doi.org/10.47070/ijapr.v10i5.2344</u> Source of support: Nil, Conflict of interest: None Declared *Address for correspondence Dr. Raj Kumar Meher MD Scholar, Dept. of Roga Nidana & Vikriti Vigyana, National Institute of Ayurveda, Jaipur (Raj.) Email: <u>raj9777207784@gmail.com</u> Mob: 9777207784

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.