

Ayurveda: A Novel Horizon For Lifestyle Disorders/Non-Communicable Diseases (LSD's/NCD's)

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ABSTRACT

Life style illnesses are also called as the sicknesses of sturdiness or diseases of civilization. "Lifestyle diseases" known, the world over, as 'non-communicable sicknesses' (NCD's) or 'chronic disease of lifestyle' (CDL) emerge from beside the point courting of humans with their environment. NCD's, commonly seen as chronic sicknesses, have nowadays passed the infectious illnesses in terms of the principal reason of mortality and morbidity. WHO has lately identified NCD's as one most of the top 10 global health threats of 2019. It is a scientific circumstance or sickness that isn't due to infectious cause and most of them are linked to as the 'Life Style Disorders'. The fundamental types of NCD's are cardiovascular ailments, cancer, Chronic Respiratory Disease (COPD and asthma), diabetes, osteoporosis and others. NCD's are the leading reason of dying globally. NCD's kill nearly forty million human beings every year, accounting to 70% of overall deaths globally. Children, adults and the aged are properly at risk of the danger elements contributing to NCD's. WHO has identified essential hazard factors for NCD's as tobacco, extra salt/sodium consumption, alcohol consumption, inadequate bodily interest, raised blood strain, weight issues, hyperlipidemia, raised blood glucose degree and so on. The top goals of the *Ayurvedic* system of medicine being prevention of illnesses in addition to preservation and promoting of health, *Ayurveda* has tremendous ability in prevention in addition to manipulate of NCD's. *Ayurveda*, the holistic health care gadget of indigenous subculture places beforehand particular and effective tools for addressing the demanding situations raised through non-communicable sicknesses in the international fitness state of affairs.

Key words: *Ayurveda*, chronic disease, LCD's, Life Style Disorder, NCD's

INTRODUCTION

Life style diseases (LSD's)/Non-communicable diseases (NCD's) are identified with the aid of WHO as "Group II Diseases," a category that aggregates the subsequent conditions and causes of death: malignant neoplasms, other neoplasms, diabetes mellitus, endocrine issues, neuropsychiatric conditions, experience organ diseases, cardiovascular diseases, respiratory diseases (e.g. COPD, asthma, etc.), digestive diseases, genitourinary illnesses, pores and skin sicknesses, musculoskeletal sicknesses (e.g. Rheumatoid arthritis), congenital anomalies (e.g. cleft palate, Down syndrome), and oral conditions (e.g. dental caries). LSD's / NCD's are ailments which are probably primarily based on the regular behavior of

humans. Habits that detract humans from interest and push them inside the path of a sedentary habitual can cause some of health troubles that can motive continual non-communicable illnesses that can have near existence-threatening outcomes. Non-communicable illnesses also are referred as a "lifestyle" disorder, because of the truth that most of these illnesses are preventable ailments. The maximum commonplace reasons for NCD's consist of tobacco use (smoking), alcohol abuse, unhealthy diets and physical inactivity. The global burden of non-communicable illnesses is excessive, with 40 million deaths per year, together with 15 million deaths in people more youthful than 70 years. In low- and middle-earnings worldwide places, the non-communicable sicknesses account for 78 % (31 million) of all deaths.^[1,2]

A new country-by-nation fitness analysis in India reveals that over a long time heart- and lung-associated situations in addition to different NCD's have surpassed infectious sicknesses, and inclusive of diarrhea and tuberculosis they are the nation's leading killers. Considering the increasing incidences of NCD's and

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their burden on worldwide healthcare, worldwide mechanisms to reduce the avoidable NCD's burden consisting of a Global movement plan for the prevention and control of NCD's 2013-2020 has been planned by WHO. [3,4]

Since inception, present day medical technological information depended upon synthetic extracts or isolated thoughts which might be useful in breaking the pathology, but are also regarded for shortcomings as development of unfavourable effects as drug dependency and so on. In addition, the modern-day gadget of medication has failed to offer effective treatment for lots of continual ailments or NCD's. To triumph over such shortcomings lobby on conventional systems of drugs has started to come up internationally. WHO too has recognized the importance of conventional treatments in global health care system. It is now encouraging and promoting the conventional treatments in countrywide healthcare applications because of the truth that they are relatively safe. [5] Although modern day treatments may be very useful in handling medical emergencies and in some particular ailments, it is now increasingly facing a state of affairs in which ailments are not any more unmarried entities and are in fact complicated with one of the being main to other, e.g. obesity ends in some of different diseases which includes diabetes, cardiovascular diseases etc. [6] The reductionistic approach of the cutting-edge modern medicine and its perception in linear causality also faces limitations. On the alternative hand, fitness and infection are extra holistically understood within the conceptual framework of *Ayurveda*, which differs in essential approaches with the tenets of modern day remedy.

Aim of this study

1. To explore and re-evaluate the various *Ayurvedic* concepts mentioned in relation to life style disorders (LSD's/NCD's).
2. To explore the relationship between different etiological factors related with LSD's.
3. Suggest an *Ayurvedic* protocol for managing LSD's.

MATERIALS AND METHODS

Materials related to lifestyle disorders/ non-communicable diseases have exhaustively been collected. The main *Ayurvedic* texts used in this study are *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Samgraha*, *Ashtanga Hridaya*, *Bhava Prakash* etc. We have also referred to the modern books and searched various websites to collect information on the relevant topics.

REVIEW AND DISCUSSION

Causative agents for NCD's/LSD's

A lifestyle of someone is an outcome of the physical developments, conduct, nutritional style, psychological functions

and so forth. Many of those inclinations are determined/ nurtured from the parent, siblings and the encompassing socio-economic environment. So the bodily sports are inspired by manner of the mental feeling, i.e. the psychology. When the intellectual initiation and manipulate is disturbed, it consequences with various NCD'S/ LSD'S. It is referred as *Prajnaparadha* in *Ayurveda*, one of the three vital reasons for various ailments. The modern age developing stress in the course of the paintings and rapid business boom, coupled with faulty dietary behaviors such as numerous forms of fast food meals along with preserved meals, extra quantity of smooth liquids and drinks, canned meals and lack of workout result into the disturbance of *Agni* or metabolism which end up in diverse persistent and non communicable sicknesses. According to *Ayurvedic* concept, diseases and fitness are related to food and manner of existence. Eating is the vital concept pressured vitally in *Ayurveda*. Eating healthy food curbs down and nearly gets rid of a majority of the prevalent NCD'S/ LSD'S. However, when mixed with wholesome way of life, it's far absolutely removed.

Suggested *Ayurvedic* protocol for management of NCD's/LSD's

Ayurveda being a holistic science, emphasizes the importance of a healthy lifestyle in preventing diseases which is evident from its objective- "*Swasthya Rakshanam*". [7] *Ayurveda* offers various methods to manage NCD'S/LSD'S such as following ideal *Dincharya* (daily regime), *Ritucharya* (seasonal regime), *Sadvritta* (pscho-social regime), *Panchakarma* (the fivefold purification) or with the help of *Rasayana* (akin nutritional boosters), etc. All of which are instrumental in the prevention of disease and promotion of ideal health. These concepts are mainly aimed at understanding the rhythms of nature and body and the measures for maintaining homeostasis in these rhythms leading to healthy life. According to *Ayurveda*, the three pillars of healthy and long life are- *Ahara* (proper diet), *Nidra* (proper sleep) and *Brahmacharya* (divine lifestyle and control of sexuality). A closer look at all these aspects is needed to bulid an *Ayurvedic* protocol for managing LCD'S/NCD'S and hence is being discussed as follows-

1. **Ahara (Diet):** To fulfil the aim of prevention of disease in *Ayurveda*, the theory of *trayoupasthambha* (*Ahara*, *Nidra* and *Bramcharya*) plays a key role in maintenance of health and long life span. [8] As per *Ayurveda*, both the living human body and the diseases afflicting it are the products of *Ahara* consumed. Use of *hita-ahara* (wholesome diet) promotes health and longevity whereas *ahita-ahara* (unwholesome diet) promotes the genesis of different disorders. Unfortunately in today's era, the concept of *hitaahara* is continuously being ignored, leading to the emergence of lifestyle disorders. *Ayurveda* has also described eighteen types of dietary incompatibilities (*Viruddha Ahara*), [9] which should be avoided to maintain health and longevity. In this way, *Ayurveda* offers different *Pathayapathya*

(do's & don'ts) regarding diet/dietary supplementations which definitely help in the prevention and management of a wide range of lifestyle disorders. *Ayurveda* advocates specific rules for taking diet such as *Ashtaharvidhi Visheshayatanani* and *Dwadasha Ashanapravicharana*,^[10, 11] and also specific regimens for regulating lifestyle such as *Dinacharya*, *Ratricharya*, *Ritucharya* and *Sadvritta*.^[12-15] A person whose lifestyle is based on these principles and is truthful, liberal, forgiving and serves noble persons will never be sick.^[16]

2. **Nidra (Sleep):** It has been considered as *brihana* factors (nourishing factor) in routine life, meaning to say that it promotes health by nourishing *dhatu*s and increasing *kapha* which is responsible for the strength and immunity of body as well as mind. One who gets sound sleep at night can digest the food well, his *kayaagni* is enhanced and there is proper nourishment of body. As per *Acharya Charak*, *sukha-dukkha-karshya-bala-abala-vrushta-klibata-gnyanam-agnyanam-jivana* and *mrityu*, all these depend upon proper or improper *Nidra*.^[17] *Acharya Sushruta* has said that by taking proper and adequate sleep, the person will be free from diseases, will have pleasure of mind and endowed with strength and complexion.^[18] Researchers suggest that an appropriate sleep can help to lower the prevalence of hypertension, cardiovascular diseases, anxiety, obesity, etc., all of which are mainly the derivatives of disordered lifestyle.
3. **Brahmacharya:** *Ayurveda* gives importance to *Brahmacharya*, which is usually translated as celibacy, however *Brahmacharya* is not just celibacy. Its literal meaning is living a divine life for which control of sensuality and sexuality and right use of creative power is essential.
4. From epidemiology point of view, diseases result from interaction of triads of epidemiology i.e., agent, host and environment.^[19] On the basis of communicability, disease can be classified broadly as communicable and non communicable. The prevention of communicable diseases is based upon actions targeted towards specific agents and their modes of transmission and specific measures such as vaccination used to build host defences. On the other hand, prevention of non communicable diseases is basically related to control and modification of risk factors of the disease which relate primarily to *Ahara* (diet) and *Vihara* (lifestyle).
5. Another important aspect of *Ayurveda* for the prevention of NCD'S/LSD'S is *Satvavajaya Chikitsa* and *Daivavyapashraya Chikitsa*. The term *Sattvavajaya* implies to that modality which is therapeutic for mental or emotional stresses and disturbances. This is secured best by restraining the mind from desire for unwholesome objects. All these measures help in developing control over the *Manas* or mind, which is usually unstable.^[20] *Daivavyapashraya Chikitsa* includes chanting *Mantras*,

Aushadhi, *Mani Dharana* (spiritual use of herbs and gems), *Mangal Karma* (propitiatory), *Bali* (offering oblations), *Homa*, *Prayashchita* (ceremonial penances), *Upavasa* (fasting), *Swastyayana* (rituals for social well being) etc. All these rituals activities directly or indirectly exert a positive impact on the mind (*Manas*), promote psychosomatic health; impede the psychosocial stress and leads to reduction and abolition of negative thoughts like suicidal ideations etc. Some 90% of the world's population is engaged in religious or spiritual practices. These practices are thus the major means of coping with stress and for prevention and management of NCD'S/LSD'S.^[21]

6. **Panchakarma:** *Ayurveda* also advises seasonal *Panchakarma* as a preventive measure for maintenance and promotion of physical as well as mental health. *Panchakarma* is claimed for its preventive, promotive, prophylactic and rejuvenative properties. It is a collective term used to denote the five principal procedures or technologies of bio-purification.^[22] These procedures are used in an orderly way to cleanse the body channels, eliminate the toxins out of the body and restore the harmony of biohumors (*Tridosha* i.e. *Vata*, *Pitta*, *Kapha*, and *Manasa Dosha*, i.e. *Raja* and *Tama*) to obtain long-lasting beneficial effects. This further leads to harmonious chemical balance inside the biosystem and thus provides a normal chemical and electrical environment in the brain, all ultimately ending up to restore the homeostasis. *Panchakarma* thus helps to restore the mental health, reduces the stress and therefore, help in the prevention as well as management of many lifestyle disorders.
7. **Rasayana:** *Ayurveda* propounds a separate concept of medicinal dietary supplements in the context of *Rasayana* (rejuvenative measures). The realms of *Rasayana* extend beyond food and diet. *Rasayanas* can be used as nutritional supplement as well as medicine depending upon its various types. Most *Rasayanas* produce their nourishing and rejuvenating effect by promoting the *Agni Bala* (enhanced digestion and metabolism), acting as direct nutrients and by way of *Sroto-prasadana* (purification of body channels), resulting in an improved nutritional status, which eventually leads to an improved quality of *Dhatu*s (body tissues).^[23-25]
8. **Sadvratata and Achara Rasayana:** *Ayurveda* offers some code of good conducts under the heading of *Sadvratata* and *Achara Rasayana*.^[26] The conducts under *Sadvratata* and *Achara Rasayana* can be categorized into personal (viz. limited sexual relations, early sleeping and awakening, avoid excess exertion, avoid suppression of natural urges, regime of bathing, keeping skin clean), social (keeping mercy on others, telling truth, avoiding alcoholism, being soft hearted, always using cleaned and washed cloths, etc.), psychological and emotional (trying to be in a steady mental state i.e. avoiding height of emotions,

overlooking the insults, keeping patience, etc). Such type of lifestyle adaptations are always helpful in the prevention and management of a wide range of NCD'S/LSD'S.

CONCLUSION

The holistic method of *Ayurveda* of treating the patient as a whole means intervention centered closer to wholesome physical, psychological, and spiritual well-being. This makes *Ayurveda* a fantastic choice in managing the NCD'S/LSD'S. In fact, *Ayurvedic* standards and the strategies of healthful living can be easily included into people's everyday life, their cuisine and other day after day activities. By offering most advantageous fitness through customizing and harmonizing eating regimen and way of life sports, it can have a pervasive affect on the daily life of the people. Thus by every means, *Ayurveda* goes past modern system in wholesome treatment of NCD'S/LSD'S sicknesses and hence it needs to be widely propagated for ensuring a harmonious life in the present age living conditions.

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