

Panchakarma & Rasayana: Ayurvedic Strategies for Preventing Lifestyle Disorders

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ABSTRACT

Lifestyle diseases occur due to an individual's everyday regimen and arise from an incorrect interaction between individuals and their environment. Lifestyle diseases are a term given to all diseases arising from unhealthy lifestyles and resulting in a change in the behavioural pattern of humans. It is estimated that approximately 70-80% of the present-day population indulges in harmful lifestyle factors like alcohol, smoking, unhealthy diet, physical inactivity, a sedentary lifestyle, and a disturbed biological clock, etc. Among these factors, the most hazardous factor is Mental stress, with a higher impact on health as compared to others. These result in the development of Chronic and non-communicable diseases like Heart disease, Stroke, Hypertension, Diabetes, Obesity, Metabolic syndrome, Depression, Chronic obstructive pulmonary disease, Malignancy, etc. A healthy lifestyle must be adopted through a proper, balanced diet, regular physical activity, and by respecting the biological clock. Ayurveda offers various methods to manage lifestyle disorders by following Dinacharya, Ritucharya, Panchakarma therapy, and Rasayana therapy. Panchakarma effectively removes toxins from our body that are considered a source of many illnesses. Panchakarma is an Ayurvedic way of purifying our bodies through the detoxification process. The word Rasayana means the way for attaining excellent Rasadi Dhatus. Rasayana is a unique branch of Ayurveda. it promotes the inner healing power of an individual and helps in overcoming the pain and disease while promoting the immunity. Ayurveda applies measures in preventing the upcoming epidemic of lifestyle disorders, which are preventable with changes in diet, lifestyle, and environment.

Keywords: Panchakarma, Rasayana, Lifestyle disorder, Purification

INTRODUCTION

Lifestyle diseases are diseases primarily based on the daily habits of people as a result of an inappropriate relationship with the environment. According to Ayurveda, those diseases may be due to Pragyaparadha (intellectual blemish) or Asatmya Indiyartha Samyoga (unhealthy sensory perception), which results in disharmony in the body, either as an increase or decrease of Dosha, and are the cause of lifestyle diseases. The people's per capita income and living conditions are favourable for a healthy generation now. But unfortunately, it is sad to observe a technologically and educationally rich generation with poor physical and mental ability. There is almost a cent percent reduction in communicable diseases due to advanced medical diagnosis, superior treatment, and preventive measures. But the changes in lifestyle and dietary

choices greatly increase the risk of non-communicable diseases or lifestyle diseases.

Lifestyle disorders are a fast-rising problem in India. Ayurveda, as the science of life, is a part of the culture of the Indian lifestyle. But the westernization of our culture is giving rise to lifestyle disorders like Madhumeha, Hridaya Roga, Pakshaghata, etc. The term Ayurveda means the science of life which has prescribed a healthy lifestyle. Acharya Vagbhata has explained these lifestyles in Ashtanga Hridaya and Ashtanga Sangraha in Dinacharya Adhyaya ^[1,2]

In the management of lifestyle diseases, Ayurveda offers various regimens including Dinacharya (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 of utmost importance 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 herbs also provides enough scope not only for the prevention of disease, but also for the promotion of health and the cure of disease.

Life is in concordance with the principles of right living and determines the root causes of suffering & unhappiness. To fulfil the healthy life (Hitayu-Sukhyu), the theory of Tri-Upstambha Ahar, Nidra, and Bramhacharya are three pillars of life & play a key role in the maintenance of health & a long, healthy life span. They support the Tristambha Vata, Pitta, Kapha of the body, and also Tri guna Satva, Raja, Tama. But in the present era, every person is running in a competitive race and does not follow any rules of life, no perfect time to eat, food & sleep with a modern lifestyle, over stress, an aggressive mind that affects the body as well as Prakrati, resulting in Dosha Vaisamyata. If a continued unhealthy lifestyle leads to Dosha-Dhatu Vaisamyata, Agni Bala Vaisamyata (impaired digestion and metabolism), Strotodusti (Dysfunction of body channels), abatement of Satva (impaired mental condition), causing various types of lifestyle disorders. Dilemma with Lifestyle disorders is that these are insidious in onset, take a longer span to become the cause of death, medicines are not effective in their treatment, and there is no permanent cure for such kind of disorders. These disorders are not easy to manage, and Classical Ayurveda texts have good interventions to prevent and manage Doshadhatu Vaisamyata, Dhatu Dushti Gat Roga as lifestyle disorders like dietary management by Ahar-Vihar, Sanshodhan Upkrama by Panchakarma, Sanshman Upkrama by Rasayana, Daivya Vyapashraya, and Satvavajaya, followed by Dinacharya, Ritucharya, Sadvrit, and Achar Rasayan.

ROLE OF PANCHAKARMA IN LIFESTYLE DISORDER

Ayurveda literature, like Charaka Samhita, Sushruta Samhita, Ashtanga Sangraha, and Ashtanga Hridaya, was referred to for descriptions of lifestyle disorders and the utility of Panchakarma. Different Teekas and translations were referred to and arrived at appropriate interpretations of the descriptions that Shodhana therapy can be conducted as the initial line of treatment before giving Shamana Aushadhi or modern medicines.

Panchakarma is an effective therapy in managing autoimmune, neurological, psychiatric, and musculoskeletal diseases of chronic and metabolic origin. ^[3]

Panchakarma therapy is considered superior to Samshamana therapy in Ayurveda as the disorders treated with Samshamana therapy may sometimes be provoked again by gaining momentum with the help of etiological factors and vitiated environmental factors but in case of those treated with Panchakarma, there is lesser/no chances of gaining such type of momentum and thus, lesser/no chances of recurrence of a particular disorder. ^[4]

It also facilitates the absorption of nutrients and drugs administered thereafter in favour of attaining their desired pharmacotherapeutic effects. Panchakarma also restores mental health, reduces stress ^[5], and therefore, helps in the prevention as well as management of many lifestyle disorders. The benefits of the Panchakarma procedure are the following -

- Removal of impurities from the body.
- Restoration of equilibrium and harmony in the body.
- Removal of negativity and enhancement of an optimistic feeling, improvement of mental, physical, and emotional well-being, and an enhanced sense of self-worth.
- Overall improvement of health and well-being.^[6]

Panchakarma utilizes a set of therapeutic procedures that are given in a specific order to promote the elimination of toxic substances from the body via the nearest possible route of elimination. Panchakarma accomplishes the removal of toxic accumulations and the return of the Doshas to normalcy and balance.^[7] All the Panchakarma regimens are followed to achieve homeostasis and not just counter the specific symptom. That is why it outscores the conventional medicines when it comes to tackling a multi-dimensional disorder like Lifestyle diseases.

Panchakarma plays a vital role in the preservation, maintenance, and conservation of health and the promotion of longevity. They form a part of the regimen of preventive medicine (Swasthavritta) indicated as prophylactic measures in the context of epidemics and pandemics. Mandagni is the cause of all diseases. For the correction of Agni, Panchakarma is the best treatment.

ROGANUSAR PANCHAKARMA

Diseases are the outcome of disturbed Doshas, and thus, Panchakarma treatment is used for all types of diseases. Some of the diseases that are commonly treated are;

Karma	Dosha Dominancy	Diseases
Vamana	Kapha predominant diseases	Obesity, Thyroid, Diabetes, Asthma, PCOS (polycystic ovarian syndrome), and skin diseases.
Virechana	Pitta predominant diseases	Hyperacidity, skin diseases.
Basti	Vata predominant diseases	Arthritis, spondylitis.
Nasya		Migraine, Headache, Sinusitis, Hair fall, Premature graying of hair, Frozen shoulder, Cervical spondylosis, Sleeplessness, allergies, etc.
Raktamokshana	Rakta predominant diseases	Gouty arthritis, etc.
Shirodhara		Sleeplessness, Headache, Dandruff, Psychological diseases, etc.
Abhyanga		Relaxation and frequent body pain.

The five technologies of Panchakarma include Vamana (therapeutic emesis), Virechana (therapeutic purgation), Asthapana Basti (therapeutic decoction enema), Anuvasana Basti (therapeutic oil enema), and Nasya Karma (nasal medication). Ayurveda places more emphasis on the preventive aspect of the Panchakarma rather than the curative.

The following therapies are done under Panchkarma procedure-

- **Snehana:** Includes both Bahya and Abhyantara Snehana. It has Rasayana effect, maintains body tone, makes muscle action smooth by acting as Vata Dosha Anulomaka, makes body Mrudu, removes any obstructions to Mala.^[8]
- **Abhyanga** ^[9] heals Sharira as well Mana. Prevents depression and Rasadhatujanya diseases like Hridaya Roga.
- **Swedana:** Relieves Sthambha, Gourava, Sheetata in Sharira, and produces Sweda which in turn expels the vitiated Dosha.^[10]
- **Vamana:** It is the process of therapeutic emesis, especially indicated to eliminate morbid Kapha out of the body and for the management of Kaphaja disorders. In case of Lifestyle disorders, Vamana is a purely suited treatment modality as it removes the vitiated Kapha from the body, which is the main reason behind such disorders.

Removes Dushita Kapha Dosha through Urdhwa Marga ^[11] Examples - Obesity, Thyroid, Dyslipidaemia, Migraine, Diabetes, Asthma, PCOS (polycystic ovarian syndrome), and skin diseases, etc.

In a study, it is reported that Vamana increases glucocorticoid, ACTH, and catecholamine. Vamana increases the heart rate and results in vasodilatation. It prevents autoimmune and inflammatory conditions. Anti-streptolysin (ASLO) titre is reported to be reduced by Vamana. This suggests Vamana is a definite answer for autoimmune disorders.^[12]

Virechana: It is the process of therapeutic purgation especially indicated to eliminate morbid Pitta out of the body through anal route and for the management of Pittaja disorders. Virechana is even a treatment for Pitta Samsargaja Doshas, Kapha Samsrista Doshas, and also for Pitta Sthanagata Kapha. It is worth mentioning that Virechana, unlike the modern purgatives, is not merely an act to open the bowel, but is a complete therapeutic measure which has systemic as well as local effects.^[13] It Removes Dushita Pitta Dosha through Adho Marga.^[14] Studies show that Virechana can lower hepatic glucose production and help to prevent elevated blood sugar level.^[15]

Basti: There are two type of Basti

1. Niruha Basti

It mainly acts in two ways;

- Basti administered in the Pakvashaya affects the whole body by its Veerya, similarly as the sun in the sky affects the Bhurasa (water) though it is far away. This example shows action of Basti is not only dependent upon absorption of the active principle, but also affects the body as soon as these active principles come in contact with the Pakvashaya, proving the action of Basti Veerya by Nipata.
- When Basti is administered in the Pakvashaya, its Veerya (probably active principles) is taken up by Samana Vayu with the help of Apana Vayu. Then it reaches other Vayus also, and affects them by its action. It also keeps Pitta and Kapha in their proper places. It exerts its effect on Bhutas, which are similar to that of the Guna of Veerya. The transport of Basti Veerya is by Kedarikulya Nyaya, which makes it spread all over the body by different Vayus. This quotation supports the theory of absorption of Basti active principles, i.e., phytochemicals of the Basti, as the action is dependent upon Gunas, which are the properties in Dravya.

2. Anuvasana Basti

The Mucosal layer is the most superficial which comes directly in contact with the administered Basti

Dravya (drugs). When the intestine gets purified daily, the layers of the intestine and villi get the nutrition, and further absorption of micronutrients may be enhanced, and these micronutrients may enter the circulation and finally reach the target organ. The mucous membrane of the intestine can easily absorb the lipid-soluble content administered through the Anuvasana Basti and finally assimilate into the circulation for systemic action.^[16] It Removes Dushita Vata Dosha through Adho Marga.^[17] Examples – Chronic Vata diseases, Infertility, constipation.

- Niruha Basti facilitates peristaltic action and enhances the absorption of nutrients from the caecum and ascending colon. Mustadi yavana basti (a type of niruha basti) is seen to reduce the TB specific IgG and IgM significantly. This denotes the immune modulation effect of Basti therapy.^[18]
- Anuvasana Basti influences the immune function of the body by the production of T helper cells, leucocytes, cytokines, and modulation of the lymph mechanism.

The Enteric nervous system of the GIT has a connection with the CNS. ENS works in synergy with CNS. Stimulation of ENS by chemo or mechanical receptors in turn stimulates the concerned CNS. This might be a reason behind the efficacy of Basti in neurological conditions like paralysis. The role of the gut microbiome should also be considered here. Through Basti, there might be an alteration of the gut microbiome, which secretes enzymes that might stimulate the CNS.^[19]

Nasya:

It is the best method to eliminate and alleviate the vitiated Doshas of Urdhvanga. Taila has been mentioned for Nasya Karma in Kapha-Vata Dosha Pradhana condition.

Aggravation of Doshas takes place in the Shirah (head) due to the irritating effect of the administered drug, which results in an increased blood circulation to the brain due to the vasodilator effect of histamine released in response to irritation caused by the Nasya drug.^[20]

The facial vein has a direct connection to the ophthalmic vein and then to the deep venous sinus within the cranial cavity, the cavernous sinus. The facial vein does not possess any valve in its course, and the cavernous plexus stands for arteriovenous communication of the nasal cavity. Therefore, there is the possibility of reverse circulation of Nasya Dravya, reaching the brain circulation after being absorbed by the highly vascular mucous membrane of the nasal cavity.^[21] Hence, accumulated morbid Doshas are expelled from small blood vessels and ultimately, they are eliminated through the nasal discharge and by salivation.

Moreover, pre and post-procedure massage and fomentation at the supraclavicular and posterior part of the neck help to improve the local circulation, enhancing the absorption of the drug and also relieving local stiffness.^[22]

Nasya Removes Dushita Doshas of Urdhwa Jatru Pradesh through Nasa and Mukha.^[23] Examples- Migraine, headache, sinusitis, hair fall, premature greying of hair, frozen shoulder, cervical spondylosis

- **Dhoomapana:** Inhalation of medicated smoke removes Kapha and Vata Dosha Sanchaya from Kantha, Nasa, cleaning of sinuses, thus preventing infections.^[24]
- **Raktamokshana:** Removes Dushita Rakta Dhatu, leading to Rakta Shuddhi.^[25]

Other allied Panchakarma procedures –

Udvartana and Samvahana

The effects of Samvahana as per Acharya Sushruta are Preeti, Nidrakara, Vrishya, Kapha Vatahara, Shramapaha, Mamsa Rakta Twaka Prasadakaram, Shiramookha Virechana, Dourgandha, Meda Vilayana. These effects are achieved by Samvahana, Udvartana etc.

After Ruksha Udvartana or Udgharshana, Kapha is reduced. In this procedure, the metabolic waste products are carried by lymphatics to the blood and ultimately excreted through the urine. So, the body becomes free of any toxins and feels devoid of heaviness.

Udvartana/ Samvahana like procedures drain out these metabolites, including lactic acid, water, and carbon dioxide. So 'Shrama' is reduced. Demolition of fat (Meda Vilayana). Massage, when performed vigorously, may emulsify fat in the superficial connective tissue cells. In the emulsified state, the fat globules may enter the lymphatic system and may be metabolized.^[26]

Shirodhara

By this procedure, the mind comes down to a tranquil state, it reduces stress, and helps in the normal and better function of the mind. All the benefits of meditation and relaxation are achieved by the procedure of Shirodhara. In today's busy world, no one has time to lie down quietly and relax for a while. We are always exposed to a lot of stress and tensions. If we lie down relaxed for some time with the practice of meditation, we feel better.

The process of Shirodhara also produces a meditation effect, which helps to overcome the complaint of insomnia and stress-related disorders. On the other hand, the procedure of Shirodhara acts on the level of Yogic Chakras. It stimulates the supreme Chakras, i.e, Aagya Chakra and Sahasrara Chakra, which are situated in the head region. These Chakras govern all the vital energy in the body. Due to the stimulation of these Chakras, the individual gets a good mental condition. Hence, Lifestyle disorders benefit from the Shirodhara.

Thus, Panchakarma procedures can be found to be a highly effective modality in various Lifestyle disorders by increasing the strength of Agni, leading to increased digestive power and increased absorption of nutrients and drugs. Thus, ultimately increases the bioavailability of nutrients and drugs.

ROLE OF RASAYANA (Rejuvenation) IN LIFESTYLE DISORDER

It is a Sanskrit word that consists of Rasa (nutrition) & Ayan (path), which refers to nutrition and its transportation in body channels (Stroto Prasadana). Many Rasayanas are described in Ayurveda according to their essentiality, like Medhya Rasayana for developing the brain, Hridya Rasayana for being a good cardiac activity, Twachya Rasayana for healthy skin as well as good cosmetics, etc. Rasayana karma affords a preventive role against all ranges of lifestyle disease through improved metabolism, promotes immunity, improves endocrine, exocrine secretion, antioxidant action, antiaging, hemopoietic effect, adaptogenic action, anabolic action & neuroprotective action at the molecular level.

In the present scenario, one of the greatest problems that the world is facing today is that people are not able to follow the rules of healthy and happy living due to their unawareness or due to their personal, social or professional obligations like intake of substandard diet, Viruddha, Vidahi, Abhishyandi diets and abandoning the rules of dietetics as described in texts. Due to these factors, a nourishing fluid (Rasa Dhatu) of good quality is not produced, and Strotovarodha is manifested. Therefore, the nutrition of further Dhatus is also impaired, and an imbalance in doshas occurs, which makes the person susceptible to illness. Rasayana are the means and methods of bringing qualitative improvements at the cellular level, and this can either be drug-based, food-based, or nondrug-based. Many herbs and dietary materials can act as Rasayana and work as immune stimulants, antioxidants, adaptogenic, and antistress agents, etc.^[28]

The possible mechanisms by which the action of Rasayana can be interpreted with modern aspects-

- 1. Antioxidant action:** Antioxidants are defined as substances whose presence in relatively low concentrations significantly inhibits the role of oxidation of targets. Being present in serum, these

antioxidants circumvent the damage caused by oxygen-free radicals.

2. **Immunomodulatory Action:** - Immunomodulator is a substance that alters the immune system to produce antibodies or sensitized cells that recognize and react with the antigen that initiated their production.
3. **Adaptogenic Action:** An adaptogen is a metabolic regulator that increases the ability of an organism to adapt to environmental factors and to avoid damage from such factors. environmental factors can be either physiological (External), such as injury or aging, or psychological (internal), such as anxiety. Some adaptogenic herbs are Ashwagandha, Tulsi, Haridra, Pippali, Amalaki, Guduchi, and Shatavari.
4. **Nootropics** – they are substances that promote intelligence and the functions of the brain. These drugs can be categorized as Medhya Rasayana drugs, namely – Mandookparni, Guduchi, Yashtimadhu, and Shankhpushpi.

DISCUSSION

Lifestyle disorders like Madhumeha and Sthoulya are very common ailments in this mechanical era. Samshodhana therapy, specifically Vamana, Virechana, and Basti, plays a significant role in the Samprapti Vighatana of these disorders, promoting Agni vriddhi and Srotoshodhana. Ritu shodhana possesses a preventive effect due to its detoxifying action on free radicals, hence, it prevents disease production. Bahya Shodhana (Abhyanga, Nasya) possesses the promotive effect by providing a better and easier life. Panchakarma i.e., Abhyantara Shodhana, expels the toxins from the body at the cellular level, activates the function of the cell membrane, and activates digestion, metabolism, absorption, assimilation, and excretion. So, maintains the homeostasis of the body. Panchakarma therapy can be suggested as the initial line of treatment before starting the Shamana Aushadhi for better action. Hence, the Panchakarma practices are very significant in preventing present-day lifestyle disorders.

Panchakarma procedures are used to cleanse the body channels, to eliminate toxins out of the body, brings about the harmony of bio-humors (Tridosha i.e. Vata, Pitta, Kapha, and Manasa Dosha i.e. Raja and Tama) to obtain long-lasting beneficial effects which further leads to chemical balance inside the bio- system and thus provide the normal chemical and electrical environment in brain and ultimately restore the homeostasis.

“Swasthasya oorjaskaram” is a property of Rasayana, which means it maintains as well as boosts the health status of an individual which highlighting its immunomodulatory action. Rasayana is not only a drug therapy, but also a specialized procedure, practiced in the form of rejuvenation recipes, dietary regimen and special health promoting right conduct and behavior, i.e., Aachar Rasayana. Rasayana not only rejuvenation the physical function of the body, but also boosts the mental functions as well as can be used while treating conditions like Depression.

Rasayana is a broad term that includes Jara-Nirvartaka (checks senile degeneration), Vyadhi Nivartaka (cures diseases), Prashasta- Dhatujanaka (keeps healthy tissue level), and Dhirga Ayushkara (provides longevity) properties, and scientific studies have proven their preventive, curative, and promotive aspects of health. Rasayana therapy definitely helps to improve the immune system.

CONCLUSION

Ayurvedic Panchakarma is applicable to all cases, covering a wide range of preventive, curative, and promotive conditions. Nowadays, due to the multidimensional benefits of Panchakarma, people from all over the world are being attracted towards it to get desired benefits. So, Panchakarma proves itself to be a

holistic therapy for global health care. Rasayana therapy has significant potential in increasing the quality of life of humans. Ayurvedic Rasayana therapy offers a promising complementary approach to addressing the growing burden of lifestyle disorders. While more rigorous research is needed, existing studies suggest potential benefits in stress reduction, cognitive enhancement, metabolic health, and overall well-being. The holistic Ayurvedic approach, emphasizing personalized treatment, lifestyle modification, and long-term health promotion, aligns well with modern concepts of preventive and personalized medicine.

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