

Role of Panchakarma as preventive care with special reference to concept of 'Swasthya'

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Abstract

Prevention is always better than cure, but preventing forthcoming diseases is always challenging to mainstream medical sciences. Lifestyle diseases consists of those diseases whose occurrence is primarily based on daily habits of people. The onset of these lifestyle diseases is insidious, they take years to develop, and once encountered do not lend themselves easy to cure. The primary formal system of medical science - Ayurveda has an extremely high contribution in prevention and maintenance of harmony with the nature, which is considered as a stage of Swasthya (wellness). Swasthya (wellness) is a destination, and Ayurveda is the key to attain and protect this. One among the most evident modalities adopted is Panchakarma. This is a brief review related to Panchakarma with special reference to Swasthya

Keywords

Swasthya, Ayurveda, Panchakarma

Introduction

The main factors which contributes to the lifestyle diseases include bad food habits, physical inactivity, wrong body posture, and disturbed biological clock. A report, jointly prepared by the World Health Organization and the World Economic Forum, says India will incur an accumulated loss of \$236.6 billion on account of unhealthy lifestyles and faulty diet. Other commonly occurring lifestyle disease includes depression, joints pain, fatigue, arthritis, metabolic disorder, early degenerative change, early aging, respiratory disease and gynaecological disorders. Nearly all of them can be traced back to improper ingestion and nutrition, lack of calmness and focus, constant feeling of agitation, listlessness or jitteriness, sedentary or workaholic professional life, or inadequacy of physical exercise and leisure time. The concept of lifestyle diseases usually rests on two assumptions, that the diseases increase in frequency because of changes in people's behaviours as countries become more industrialised and more affluent, and that they are caused by the ways people lead their lives or behave; thus, the concept in itself contains an aetiological explanation.^[1]

Ayurvedic approach is based on individual Prakriti (Ayurvedic constitution) and configuration of everyone which is different from others and influences the body function of individual belongs to physical, psychological, and spiritual realms. Any management of

disease considers, every extra environmental and other impacts including the mental status of the individual to recoup his body strength for fighting against the disease. Ayurveda provides multidimensional management therapy which systematically cleanses the whole system and helps in regaining harmony with nature.

There are some important steps for manoeuvring human life i.e. first one is to increase the immunity through identification of his Prakriti. Next is to develop such behavioural adoption which suites for the particular individual so that the chances of developing any disease will be minimised.

Ayurveda emphasizes on three folds of therapeutic management of the disease viz; Samshodhana (purification), Samshamana (pacification) and Nidana parivarjana (avoiding causative factors). Panchakarma or Samshodhana is one of the important therapies of Ayurveda which deals mainly with elimination of the aggravated Doshas from the body.^[2] Panchakarma represents a unique approach of Ayurveda with specially designed five procedures of internal purification of the body through the nearest possible route. Panchakarma is not merely a Shodhana therapy as it is understood, but also broad spectrum of therapeutics. Process of elimination of the disease-causing toxins along with revitalization of the tissues. One of the functional modalities of treatment in preserving and promoting the perfect health. Ayurveda advises to undergo specific Panchakarma according to season for purification of the the body which also promotes relaxation of the mind, improves the digestion and metabolism. In today's world people are suffering from stress and anxiety, which is leading to disease like improper digestion, lack of sleep, allergies, heart disease, diabetes, chronic fatigue, cancer, osteoporosis

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etc. These diseases are mainly due to deep seated metabolic toxins. Panchakarma eliminates these metabolic toxins from the body, allowing permanent healing of tissues and channels.

Methodology

Data collection regarding the role of Panchakarma in relation to concept of Swasthya from classical Ayurvedic literature, scientific articles, and practical experiences. Data mining was carried out from various texts, peer reviewed journals and some websites of the concerned subjects. Evaluated them using scientific basis and practical aspects. This article is based on a review of Ayurvedic texts. Materials related to relevant topics have been collected.

Discussion

A) Importance of Shodhana

Food, sleep, and physical activities (especially exercise and sexual activities) constitute the three pillars of life, which are crucial in the maintenance of one's own health. Non-adherence to daily and seasonal regimen leads to accumulation of metabolic wastes in the body, thereby hampering the balance or equilibrium between the components of the body, resulting in diseases. The same cycle will continue and finally leads to season-induced changes. Shodhana is acquiring wide popularity for conditions like arthritis, metabolic disorders, GI symptoms, autoimmune and psychosomatic disorders. Shodhana bring back harmony to the body.^[3]

B) Impact of Shodhana on the body

In Shodhana, the Doshas that are emulsified and dislodged from their sites by Snehana, and led to the Koshta via Swedana, are eliminated through the oral, nasal and anal routes. Shodhana therapies are administered as a prior procedure for the Rasayana and Vajikarana, and also as a major procedure if the Bahudoshak Lakshana is found in patients. Shodhana can be divided into three types as per its intervention like Mridu, Madhyama and Pravara by assessing amount of eliminated Doshas from body. Treatment principle says that the aggravated Doshas must be expelled out from body to maintain the normalcy of health. Procedures that considered as Shodhana are Vamana, Virechana, Niruha basti, Nasya and Raktamokshana for different Doshas. In a preventive aspect, Shodhana effects the removal of metabolic products which accumulate as a result of our daily habits and lifestyle. Shodhana clears these and helps in maintaining health from various aspects physical, mental or Psychological disturbances. It increases metabolic power (Agni) by removing Ama, stabilize body tissue (Dhatu sthira) through giving energy from diet, strengthen the sense organs, increase the longevity (Deerghayu) by facilitating proper nutrition and assimilation of Dhatus and increases intelligence.

C) Who must and who must not be given Shodhana?

Healthy individuals, in Ayurvedic purview, are of two types: Healthy by routine (Bhishakparipalita Svastha), and healthy

by chance (Yadrccha Svastha). Healthy by routine are individuals who resort to diet and regimen that are conducive in the seasons. In such individuals, in whom all the components of body (Dosha, Dhatu and Mala) are in equilibrium with pleasant mind, Shodhana is not essential. But in the latter, i.e., healthy by chance, due to improper diet and regimen, there is always a fair chance of latent vitiation of Doshas. In such individuals, though being healthy, Shodhana is recommended for elimination this latent vitiation.^[4]

Even further, there are multiple domains of assessing the eligibility of an individual for Shodhana. The most significant aspect among them is the Bala of the patient. It is the sum total of the physical strength, immunity and vitality, comprising of genetic, seasonal, age-based, and diet-regimen based components. One who has sufficient Bala are eligible for Shodhana. It is recommendable that the person has the predominance of Kapha and Pitta in his body, and also recent history of episodes of constipation, heaviness, belching, heartburns, etc.^[5]

D) Action of Shodhana

Cycle of processing from taking meals to production of energy, accumulation of nutrition and expulsion of wastes play a crucial role in healthy state. Interruption of this hierarchy at some stage leads to diseases. It may be at the stage of wrong dietary habits, inappropriate digestion by reduction of digestion fire or at the stage of long-term accumulation of wastes. Shodhana works throughout all these stages by its functions as it promotes a healthy diet, facilitates absorption of nutrients by kindling the digestive fire and clearing the channels and organs wherever it goes, and expels the morbid wastes throughout body. Three factors which influences the derangement of Swasthya are Asatmya indriyarthasamyoga, Prangyaparadha and Parinama. These three comes under two major concepts, one is Vegadharana where we fail to carry out the natural physiological urges of the body, and another one is Ritu-apachara where the seasonal variance affects our general health through its

multiple actions on our healthy objects. Suppression of the 13 natural urges should be treated as volitional transgression and the sequel of the same is likely to disturb the entire psychosomatic axis and leads to exaggerated physiological and pathological responses. Pathogenesis of all these type of diseases starts with psychic later the somatic involvement is observed. Sodhana chikitsa like Basti may act on the Purisha, Mutra, Sukra vega janya vikaras, Virechana also may be use in Vegas like Purisha, Vamana can be used as urges like Chhardi, Nasya in the context of diseases in head and neck related urges like Jrimbha, Kshavathu etc. Ayurvedic literature explains if the accumulated Doshas stay aggravated for a long period of time may harms more and can be difficult to treat and finally leads to complications.

Seasonal variation of Doshas

Table No .1

Sodhana for seasonal derangement of Doshas

Doshas	Chaya	Prakopa	Prasara
Vata	Grishma	Varsha	Sarat
Pitta	Varsha	Sarat	Hemanta
Kapha	Sisira	Vasanta	Grishma

Aggravation of Doshas occurs under three stages starting from Chaya where it gets accumulated in their own sites. In Prakopa it gets accumulated in a more fluid form and shows exaggerated symptoms, then it spreads to other places where it may be difficult to eliminate. So the management is always easy it when it is in Chaya.

Table No .2

Procedures to remove Doshas

Season	Month	Dosha	Preventive treatment
Shisira	Jan/ Feb/Mar	Chaya (accumulation of Kapha)	Swedana, Udvartana, Utsadana, Murdhataila
Vasanta	Mar/Apr/ May	Prakopa (vitiatio of Kapha)	Vamana, Nasya
Grishma	May/ June/ July	Chaya (accumulation of Vata)	Sheetalopachara
Varsha	July/ Aug/ Sept	Prakopa (vitiatio of Vata)	Niruha basti
Sharad	Sept/ Oct/Nov	Prakopa (vitiatio of pitta)	Virechana, Raktamokshana
Hemanta	Nov/ Dec/Jan		Swedana, Udvartana

Precautions must be taken before administering Sodhana for its smooth conduction and to attain sufficient elimination of Doshas.

Table No.3

Factors influencing Sodhana

Nature of Dosha	Always in Koshttha, in Sanchaya
Oushadha	Selection of medication, dose of administration
Desha	The setting it is given
Kala	According to Dosha, time of administration
Bala	Rogabala, Rogibala
Agni	Adequate digestive power
Satmya	The habituations of the patient, and the status of medicine in that respect
Satva	Normal psychological condition
Vaya	Age should be suitable for administration of Shodhana.

Shodhana helps to bring out the morbid Doshas from peripheral channels to gut, from where it can be eliminated. Oleation therapy is the prime therapy to make a conducive environment for Sakhasrita Dosha and transform it into Vriddha (Increased quantity) and Vishyandita (melting them). After the increase in quantity the Doshas get detached from Shakha, Swedana or sudation makes it Paka and facilitate the transit of Doshas from Shakha to Koshta. Main therapeutic procedure of Shodhana, works on Srotomukha Vishodhana by which the Doshas can easily be expelled from Koshta. Therefore, Shodhana can be judiciously applied to remove out Doshas in their primary stages by doing Ritusodhana or in Sanchayavastha, to stop their progression towards developing diseases.

Evidence regarding Shodhana/detoxification in preventive care:

1. Innumerable biochemical reactions happen in body daily to maintain haemostasis, releasing different hormones for growth and reactions,

neurotransmitters to conduct general bodily functions etc. the widespread introduction of toxic agents into our biology has the potential to disrupt sophisticated biochemical working and becoming a wide spread source of harm. Primary exposure of toxic substances through our food habits, storage and its cultivation of food substances contaminated with hazardous chemicals that hamper the human physiology; be it drinking water, air or the assorted personal care products. Prolonged exposures to them, especially in the structural and functional formative period of an individual may lead to long term unavoidable health issues and make our lives short-lived. The lipophilic compounds which have prolonged half-lives in the body with high potential for detriment are the dominant toxic compounds within the body. Intervention to reduce the body burden of persistent toxicants the field of clinical detoxification continues fundamental and urgently required.^[6]

2. Contemporary living with habits of wrong food and behavioural regimen have been leading mankind promptly towards unhappy lives through the metabolic disorders, making a burden both in health and wealth. Ayurveda concepts help in focusing our lifestyle by Sadvritta and Svasthavritta through diet, regimen of day, night, and season. Kapha Dosha is one of the important doshas which impacts more in lifestyle disorders like diabetes, dyslipidaemia, strokes etc. Vamana is the foremost choice for the morbid Kapha, as its therapeutic effects relieves symptoms and health issues by Kapha. Among of six seasons, Vasanta is most suitable for removing this Dosha.^[7] A study shows the efficacy of Vamana Karma particularly conducted in Vasanta Ritu and it was found to be safe. Simultaneously it was observed that overall wellbeing of the volunteers and patients was improved. As the patients were suffering from different diseases and the number of patients suffering from the same disease was very less. Plasma adrenalin, histamine ESR reduction after therapeutic vomiting with also significant increasing in plasma dopamine and nor adrenalin indicates good responses towards healthy life.
3. Agni, Pitta Dosha, metabolic activity in the nature and body are the similar with regards to their functional activity. For a living organism its necessary to continue its survival by accumulating nutrients through digestion of food. Specific enzymes carry out this work from day of born to last moment of life. Pitta Dosha and its functions are well known for digestion and metabolism, but classics have other evidence towards it's secondary functions like that in skin and its glowing, lustre, intelligence, nutrition. But food articles like fried, spicy food, day sleep, the wide range of wines and alcohols leads to aggravation of Pitta. Management through medications or timely evacuation through therapeutic purgation on spring season may be a great step to avoid unprecedented health problems. Study shows significant changes in parameter like BMI, circumferences of mid arm, chest in obese persons through therapeutic purgation gives a way to undergo the

procedure as per classical Shodhana guidelines.

4. Large intestine, a 5 feet long tube, is responsible for processing indigestible food material after most nutrients are absorbed in the small intestine. It performs an essential role by absorbing water, vitamins, and electrolytes from waste material. Ayurveda interpret as Mahasrota, shariramadhya, Pakvashaya as inner most route of disease origin. Dosha which has been working all the mobility functions throughout body have higher number of self-originated disorders. Sodhana therapy, especially Basti is considered suitable to remove the morbid Vata. Niruha Basti facilitates peristaltic action and enhances the exchange of nutrients from the caecum and ascending colon. One of the frequently used formulation as Mustadi Yapana Basti is seen to reduce the Tuberculosis specific IgG and IgM in a significant amount which clearly denotes the immune modulation effect of Basti therapy. Anubasana Basti contains medicated oil without any decoction helps to reduce Vataja disorder as well as strengthen whole body with its specific ingredients as oil. It influences the immune function of the body by production of T helper cells, leucocytes, cytokines, and modulation lymph mechanism. Madhutailika Yapana Basti used in Vriddhabastha helps to improve Bala (strength), Utsaha (energy), Aayasana Swasa (shortness of breath).
5. Ayurveda established the relationship of Nasa and Siras and mentioned that Nasa is the way to reach Sira. Nasa is one among the Panchajanedriyas which works on olfaction and respiration. The medicine administered through the nostrils reach up to Sringataka marma, spreads all over Urdhajatru and eliminates the deep seated Doshas. Modern sciences also emphasize the connection between nasal mucosa and central nervous system. Drugs administered through nasal cavity are transferred to the cribriform plate and then central nervous system via olfactory neurons, supporting cells and the surrounding capillary bed or directly through cerebrospinal fluid.

6. Observational study examined with participants in the 5 day Panchakarma recorded the quality of life, psychological and behavioural changes. Ability to make positive health changes with these practices. Anxiety also significantly decreases after 3months post treatment.
7. Another study with 65 healthy male and female subjects participated in a 6 day Panchakarma based Ayurvedic intervention. Result showed as Panchakarma promoted statistically changes in plasma levels of phosphatidylcholines, sphingomyelins and others in just 6 days. Phosphaticholines can lower cholesterol, protect the liver from disease while sphingomyelins participates in many signalling pathways.
8. The gut microbiome also has important consequences for the brain and its functions, starting in early development. It influences peripheral serotonin secretion by altering number and functioning of enterochromaffin cells in the gut wall, increasing gut peristalsis and reducing transit time, but also entering the blood stream. Serotonin also plays an important role in mood. Intestinal microbiota, gut and CNS interact forming the microbiome-gut-brain axis, this occurs via afferent and efferent neural, endocrine, nutrient and immunological signals.
9. In a pilot study conducted to compare the effectiveness of Vamana in prediabetic and Non-Insulin dependent Diabetes Mellitus, it was observed that Vamana had significant impact in lowering the serum triglycerides and also maintaining long term glycaemic control in prediabetic patients, preventing the progression to diabetes. In another study, a single Vamana conducted in Vasanta Ritu was found to impart lightness and clarity of senses in more than 75% of the subjects, clearness of heart, flanks, head and throat in more than 60%, and the normal flow of Vata through the body (Anulomata) and the elimination of the doshas in the appropriate order in more than 50% of the subjects.
10. The effect of Shodhana can be analysed in three stages: Immediate effects (immediately after the procedure), short-term effects (after a period of light and conducive diet, called Peyadikrama or Tarpanadi krama) and long-term effects (resulting from regular practice of seasonal Shodhana scientifically, and if needed, the use of Rasayanas), the immediate impact is of Shodhana is Agnimandya or the weakening of metabolism. After one course of Shodhana followed by Peyadi krama or Tarpanadi krama there is restitution of metabolism, clarity of senses, etc.^[8] On regular practice of seasonal Shodhana, there is improvement of the intellect, stability of Dhatus and gradual and healthy ageing.

CONCLUSION

The global challenge of the concept for health homeostasis

and practice will be the inadequacy of primary prevention through the collective efforts. It is to be understood that the essence of Panchakarma is mainly based on Dosha and Panchamahabhuta theory. The level of Dosha and Panchamahabhuta can be analysed accordingly, to decide the regimen, to which this knowledge of Ayurveda holds as a pathfinder. These principles surely demands a closer observation for clarity. It is important to note that the concept of Sodhana is broad and adequate enough to prevent disease and maintaining health. Current pandemic situation can be explained under the broad spectrum of Janapadodwansa vikaras.^[9] Adoption of Ayurvedic dietetics and lifestyle especially Panchakarma therapies, Rasayana therapies are advised as prime remedies. This should be evaluated through multicentric trials. Judicious administration of Shodhana in a cohort and future disease occurrence can be evaluated for research purpose. The result would be promising to the scientific community.

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