

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 14, Issue 15, 1661-1674.

Review Article

ISSN 2277-7105

CONCEPTUAL ROLE OF PANCHAKARMA IN MANAGING LIFESTYLE DISORDERS

Dr. Anupma^{1*}, Dr. Vishwanath S. Wasedar², Dr. Ashutosh³ and Dr. Jyoti Lakhlan⁴

^{1*,2}PG Scholar, Department of Panchakarma, KAHER's Shri BMK Ayurveda Mahavidyalya College and Research Centre, Belagavi.

³Reader, Department of Panchakarma, KAHER's Shri BMK Ayurveda Mahavidyalya College and Research Centre, Belagavi.

⁴PG Scholar, Department of Kayachikitsa, KAHER's Shri BMK Ayurveda Mahavidyalya College and Research Centre, Belagavi.

Article Received on 19 June 2025,

Revised on 09 July 2025, Accepted on 29 July 2025,

DOI: 10.20959/wjpr202515-37849



*Corresponding Author Dr. Anupma

PG Scholar, Department of Panchakarma, KAHER's Shri BMK Ayurveda Mahavidyalya College and Research Centre, Belagavi.

ABSTRACT

Lifestyle diseases are defined as conditions that arise primarily due to the daily habits of an individual and are considered as the result of a poor connection between people and their environment. Hypertension, diabetes mellitus, dyslipidaemia, and obesity linked to cardiovascular illnesses are among the lifestyle disorders that are becoming more common. Ayurveda, known as the science of life, focuses on preserving health and treating illness by maintaining the balance of doshas, dhatus, malas, and jatharagni. As Ayurveda is regarded as a leading life science and offers effective methods for preventing and managing lifestyle disorders, it is increasingly capturing global interest for its potential benefits. Ayurveda offers effective solutions through proper dietary management, lifestyle guidance, and detoxification and bio-purification techniques like *Panchakarma*, herbal medicines, and rejuvenation therapies. The holistic approach of Ayurveda of treating

the individual as a whole with interventions aimed at physical, psychological, and spiritual well-being—makes it a remarkable choice for managing lifestyle disorders. In the management of lifestyle diseases, Ayurveda provides several approaches such as Dinacharya (daily routines), Ritucharya (seasonal routines), Panchakarma (five detoxification and biopurification therapies), and Rasayana (rejuvenation) therapies. Additionally, Sadvritta (ideal behaviours) and Aachara Rasayana (code of conduct) play a crucial role in fostering a healthy and positive psychological outlook. The five core therapies of *Panchakarma* include *Vamana* (therapeutic emesis), *Virechana* (therapeutic purgation), *Asthapana Basti* (medicated decoction enema), *Anuvasana Basti* (oil-based enema), and *Nasya Karma* (nasal administration of medication). *Panchakarma* involves a series of therapeutic procedures administered in a specific sequence to facilitate the elimination of toxins from the body through the most appropriate natural routes. This process helps in clearing toxic build-up and restoring the balance and normal functioning of the *Doshas*.

KEYWORDS: Lifestyle disorders, *Panchakarma*, *Ayurveda*, *Agni*.

INTRODUCTION

Lifestyle diseases are defined as conditions that arise primarily due to the daily habits of an individual and are considered as the result of a poor connection between people and their environment. Hypertension, diabetes mellitus, dyslipidaemia, and obesity linked to cardiovascular illnesses are among the lifestyle disorders that are becoming more common. Cardio vascular disorders still account for almost 30% of all deaths globally, making them the leading cause of death. The prevalence of these diseases among Indians has increased to concerning levels in recent years due to the country's rapid economic development and growing westernization of lifestyle over the past few decades.^[1] Other commonly seen lifestyle diseases include depression, joint pain, fatigue, arthritis, metabolic disorders, premature aging and degeneration, respiratory conditions, and gynaecological issues. Most of these can be linked to poor dietary habits, inadequate nutrition, lack of mental calmness and focus, persistent agitation or restlessness, overly sedentary or excessively work-driven lifestyles, and insufficient physical activity or leisure time. [2] Ayurveda, known as the science of life, focuses on preserving health and treating illness by maintaining the balance of doshas, dhatus, malas, and jatharagni. [3] As Ayurveda is regarded as a leading life science and offers effective methods for preventing and managing lifestyle disorders, it is increasingly capturing global interest for its potential benefits. Ayurveda offers effective solutions through proper dietary management, lifestyle guidance, and detoxification and bio-purification techniques like Panchakarma, herbal medicines, and rejuvenation therapies. The holistic approach of Ayurveda of treating the individual as a whole with interventions aimed at physical, psychological, and spiritual well-being—makes it a remarkable choice for managing lifestyle disorders.

Essentially, a person's lifestyle is the cumulative result of their physical abilities in harmony with psychological functioning, expressed through habits, behaviours, dietary choices, and living patterns. These are shaped by early childhood conditioning and influenced by the behaviours and examples of close companions such as parents, siblings, peers, and others. Therefore, lifestyle is governed by an inherent psychological control over physical and sensory activities. When this initiation, regulation, and coordination are disrupted, it leads to lifestyle imbalances, ultimately contributing to the development of lifestyle disorders. Ayurveda describes this phenomenon as 'Prajnaparadha' (intellectual blasphemy), which is one of the three primary causes of any disease. [4] There are numerous harmful actions resulting from Prajnaparadha, which serve as root causes for various diseases. For example, the habit of suppressing natural urges is a consequence of *Prajnaparadha* and is considered a contributing factor to nearly 50% of diseases. The reversal of neurotransmission or improper elimination of waste products produced during metabolism, leading to toxin accumulation, is a fundamental cause of disease. Therefore, the habit of suppressing natural urges in an improper lifestyle can be regarded as a root cause of lifestyle diseases. According to Charaka in Ayurveda, the first line of treatment involves the removal of these accumulated waste products.

In the management of lifestyle diseases, *Ayurveda* provides several approaches such as *Dinacharya* (daily routines), *Ritucharya* (seasonal routines), *Panchakarma* (five detoxification and bio-purification therapies), and *Rasayana* (rejuvenation) therapies. Additionally, *Sadvritta* (ideal behaviors) and *Aachara Rasayana* (code of conduct) play a crucial role in fostering a healthy and positive psychological outlook. The comprehensive use of all these treatment modalities has a significant impact on lifestyle disorders. Cardiovascular disorders are addressed under the term *Hridroga* in *Ayurveda*. The heart (*Hridaya*) is considered the seat of the psyche, and any psychological disturbance can disrupt the heart's pathophysiology. Therefore, it is emphasized that the heart should be protected from all types of stressors (*Pariharya Visheshena Manaso Dukkhahetavah*). [5]

In contrast, conventional Western medicine typically addresses cardiovascular disorders from a solely somatic perspective. Therefore, *Ayurveda* holds an advantage by focusing on treating the root cause of the disease, taking a more holistic approach.

AIM AND OBJECTIVE

Prevention and management of lifestyle disorders through *Panchakarma* therapies.

Causes of lifestyle disorders

Lifestyle diseases are linked to prolonged exposure to three major, modifiable behaviors—smoking, poor diet, and physical inactivity—which significantly contribute to the development of chronic conditions such as heart disease, stroke, diabetes, obesity, metabolic syndrome, chronic obstructive pulmonary disease (COPD), and certain cancers. Once thought to be confined to industrialized nations often labelled "Western diseases" or "diseases of affluence". These illnesses are now globally recognized as non-communicable and chronic diseases, falling under the category of degenerative conditions. Chronic diseases can lead to loss of independence, long-term disability, or even death, while placing a heavy financial strain on healthcare systems.^[6]

Unhealthy lifestyle choices—such as smoking, excessive alcohol consumption, poor diet, physical inactivity, and unmanaged chronic stress—are major contributors to the onset and progression of preventable chronic illnesses. Over the past few decades, industrialized nations have led the way in ground-breaking advancements. We have progressed from foraging for berries to grabbing meals at drive-through, and from climbing stairs to effortlessly riding elevators. While these societal developments have seemingly created "a better world" for us, what often goes unnoticed is the set of problems they've brought along. This "baggage" includes a range of serious health issues commonly referred to as lifestyle diseases. Lifestyle diseases are modern health conditions that arise or worsen due to our daily habits and routines, including our diet and level of physical activity.

Lifestyle diseases are distinct from other illnesses because they stem from our behaviours and daily choices and they're often preventable with simple lifestyle changes. Naturally, some risk factors for lifestyle diseases—like age, gender, and ethnicity—are beyond our control. However, by managing the controllable factors, we can significantly reduce the risk or even prevent these diseases altogether.

In *Ayurveda*, these diseases are described under *Santarpanjanya Vyadhis*. Analysing the Ayurvedic perspective on their pathogenesis reveals that they primarily involve imbalances such as vitiated *Kapha dosha*, *dushti* (vitiation) of *rasadhatu*, impaired *Agni* (digestive fire), and accumulation of *Ama* (toxins). These conditions largely arise from a state of *Santarpanajanya* or *Sanchayapradhana*, which refers to over-nourishment and excessive accumulation within the body. [7] *Ayurveda* suggests that the body's metabolism reflects the physiological state of *Agni* (biological fire) at various levels within the body. Any disruption

Anupma et al.

or impairment in this metabolic process can lead to the blockage of bodily channels by a toxic substance known as *Ama*, which plays a key role in the development of lifestyle-related disorders. Classical *Ayurvedic* texts suggest that the vitiation of *Kapha dosha*, followed by imbalances in the other *doshas*, is the primary initiating factor in the development of these diseases. The involvement of *Meda* (fat tissue) and other *dushyas* (bodily tissues) is considered especially significant. This pathological process is often triggered by factors such as excessive consumption of *Madhura ahara* (sweet foods), *Snigdha ahara* (fatty foods), overeating (*Adhyashana*), and a sedentary lifestyle. [8]

Due to these *nidanas* (causative factors), the consumed food is not properly digested, leading to the formation of *Ama*, a harmful reactive substance. This *Ama* circulates throughout the body along with *ahara rasa* (nutritive essence of food) and primarily contributes to an increase in *Sama Meda Dhatu* (visceral fat), owing to its excessively unctuous and sweet nature. The presence of *Ama* indicates impaired *Dhatvagni* (tissue-level metabolic fire) specifically at the level of *Meda Dhatu* (fat tissue).

Dalhana and Chakrapani, in their commentaries on the Sushruta Samhita, highlight that the formation of Ama is not solely a result of Jatharagni Mandata (weak digestive fire at the stomach level). It can also arise from dysfunction in Dhatvagni Vyapara—the metabolic activity at the tissue level.^[9]

Nidana sevana (High calorie diet, less activity, lack of exercise) Kaphachaya Rasa, Mamsa, Meda dhatu shathilya Srotovaigunya Symptoms of Kaphachaya According to prakruti and anshanshakalpana Sthanasamshraya Diabetes mellitus, Dyslipidemia, Hypertension, Cardiovascular

Pathogenesis of Lifestyle disorders according to Ayurveda

Role of Panchakarma in lifestyle disorders

Lifestyle diseases contribute to decreased productivity and hinder a country's overall development, making their prevention a growing concern. *Ayurveda*, the ancient science of life, offers effective methods for preventing and managing these conditions. It provides holistic solutions through proper dietary guidance, lifestyle recommendations, *Panchakarma* therapies such as detoxification and bio-purification, along with the use of medicinal formulations and rejuvenation treatments. *Panchakarma* therapy is an integral part of *Ayurveda*. *Panchakarma* refers to a set of five therapeutic procedures aimed at the internal purification of the body. These techniques help detoxify and rejuvenate the system and can be easily implemented in outpatient practice.

As modern medicine increasingly struggles to prevent major health challenges, there is a rising trend of returning to traditional detoxification practices. *Panchakarma* has emerged as a highly effective therapy for managing chronic and metabolic disorders.^[10]

Anupma et al.

The pathogenesis resulting from a modern western lifestyle can be effectively prevented through *Panchakarma* therapies. *Panchakarma* procedures such as *Vamana*, *Virechana*, *Basti*, *Nasya*, *Abhyanga*, *Mardana*, *Gandusha*, *Anjana*, *Udvartana* etc has proven to be highly effective in preventing these types of lifestyle-related diseases.

In *Ayurveda*, *Panchakarma* therapy is regarded as superior to *Samshamana* therapy, as disorders managed through *Samshamana* may sometimes reappear due to continued exposure to causative and environmental factors. However, conditions treated with *Panchakarma* are far less likely to reoccur, as the therapy addresses the root cause, reducing or eliminating the chances of the disorder regaining strength or returning.^[11]

Panchakarma also enhances the absorption of nutrients and medications administered afterward, helping them achieve their intended therapeutic effects more effectively. In addition, it promotes mental well-being, reduces stress, and plays a vital role in both the prevention and management of various lifestyle disorders. One of the key benefits of *Panchakarma* is its ability to eliminate toxins and impurities from the body. [12]

The five core therapies of *Panchakarma* include *Vamana* (therapeutic emesis), *Virechana* (therapeutic purgation), *Asthapana Basti* (medicated decoction enema), *Anuvasana Basti* (oilbased enema), and *Nasya Karma* (nasal administration of medication). *Panchakarma* involves a series of therapeutic procedures administered in a specific sequence to facilitate the elimination of toxins from the body through the most appropriate natural routes. This process helps in clearing toxic build-up and restoring the balance and normal functioning of the *Doshas*.^[13]

All *Panchakarma* treatments are designed to restore overall balance and homeostasis in the body, rather than merely addressing individual symptoms. This holistic approach gives *Panchakarma* an advantage over conventional medicine, especially in managing complex, multi-dimensional conditions like lifestyle diseases. *Panchakarma* plays a crucial role in preserving, maintaining, and enhancing health, as well as promoting longevity. It is an integral part of preventive medicine (*Swasthavritta*) and is recommended as a prophylactic measure, especially during epidemics and pandemics. Since *Mandagni* (weakened digestive fire) is considered the root cause of all diseases, Panchakarma is regarded as the most effective therapy for restoring and balancing *Agni*.

Panchakarma therapies according to diseases

Diseases result from imbalances in the Doshas, which is why *Panchakarma* therapy is applicable for a wide range of health conditions. It is commonly used to treat various disorders, including:

Karma	Dosha dominancy	Diseases
Vamana	Kapha dominant diseases	Obesity, Thyroid disorders,
		Asthma, PCOS etc
Virechana	Pitta dominant diseases	Hyperacidity, Skin diseases,
		Allergies etc
Basti	Vata dominant diseases	Arthritis, Sciatica etc
		Migraine, headache, sinusitis,
Nasya		hairfall, frozen shoulder, cervical
		spondylitis etc
Raktamokshana	Rakta dominant diseases	Gouty arthritis etc

Not every patient will need all *Panchakarma* therapies at once. The selection of specific supportive procedures—such as *Shirodhara*, *Kati Basti*, or *Janu Basti*—is tailored based on factors like the season, climate, diet, emotional state, the physician's expertise, duration of treatment, and most importantly, the patient's *Prakriti* (individual constitution). Each treatment is personalized, taking into account elements such as the choice of herbal oils, the amount of pressure applied, the rhythm of the therapy, the *Marma* points targeted, and the overall therapeutic intention.

DISCUSSION

1. Vamana

Vamana is a therapeutic emesis procedure primarily aimed at expelling excess *Kapha* from the body and is especially effective in treating *Kaphaja* disorders. In the context of lifestyle diseases, *Vamana* is a particularly appropriate treatment, as it helps eliminate the vitiated *Kapha*, which is often the root cause of these conditions.

The primary action of *Vamaka Dravya* is on the *Amashaya* (stomach), which is the main site of both *Pitta* and *Kapha* doshas. Vamana is a targeted therapy for *Kapha dosha*, addressing the root cause of its imbalance. Through the process of *Vamana*, the accumulated vitiated *Kapha* throughout the body is effectively mobilized and expelled, significantly reducing the disease process. Following *Vamana Karma*, excess fat deposits (*Abaddha Meda*) return to normal levels, as the internal *Sneha* (lipid substances) are drawn from the *Rasadi Dhatus* (body tissues) into the *Koshtha* (gastrointestinal tract) and then eliminated from the system.

Vamana is not simply a gastric lavage, as perceived by modern medicine; it has a direct therapeutic impact on the Agnisthana (site of digestive fire), particularly the liver. Since impaired Agni is a key contributing factor in these disorders, Vamana plays a crucial role in addressing the root cause.

Vamana Karma helps eliminate Kapha Dosha, which in turn leads to the cleansing and purification of the Srotomukhas (channels of the body). This, in turn, clears Srotoavarodha (obstruction of bodily channels), thereby restoring the proper flow of *Vata* and resulting in Vatanigraha (normalization of Vata movement).[14]

2. Virechana

Virechana is a therapeutic purgation procedure primarily aimed at eliminating excess Pitta Dosha from the body through the anal route, making it highly effective in managing Pittaja disorders. It is also beneficial for conditions involving Pitta Samsargaja Doshas, Kapha Samsrishta Doshas, and Pitta Sthanagata Kapha. Unlike conventional purgatives that merely promote bowel movements, Virechana is a comprehensive therapeutic intervention with both systemic and localized effects.

This therapy helps expel excess Bahudrava Shleshma and Pitta from the Vayusthana (site of Vata), leading to the stimulation (*Pradeepan*) of *Dhatwagni*—the metabolic fire at the tissue level. As a result, it helps restore the balance between *Doshas* and *Dhatus*, supporting the proper formation and nourishment of successive *Dhatus*. Every cell receives nourishment through Rasa and Rakta Dhatus, enhancing the production of the essence of Dhatus—Ojas, which is crucial for Vyadhikshamatva (immunity). Since depletion of Ojas is a key issue in lifestyle disorders, Virechana plays a vital role in its restoration. [15]

3. Niruha Basti

Basti primarily works in two ways:

a. When administered into the *Pakvashaya* (large intestine), it exerts its therapeutic effect on the entire body through its Virya (potency), much like the sun influences water on Earth from a distance. This analogy illustrates that Basti's action is not solely reliant on the absorption of its active components; rather, it begins to affect the body immediately upon contact with the Pakvashaya, demonstrating the rapid and widespread impact of Basti Virya through a mechanism known as Nipata.

b. When *Basti* is administered into the *Pakvashaya* (large intestine), its *Virya* (active therapeutic potency or principles) is absorbed and carried by *Samana Vayu* with the assistance of *Apana Vayu*. From there, it reaches and influences the other *Vayus* in the body, helping to regulate their functions. It also stabilizes *Pitta* and *Kapha*, keeping them in their proper locations. Basti acts on the *Bhutas* (elements) that share similar *Gunas* (qualities) with its *Virya*. The distribution of *Basti's* potency throughout the body follows the principle of *Kedarikulya Nyaya*, meaning it spreads systematically via various *Vayus*. This explanation supports the concept that *Basti's* effectiveness relies on the absorption of its active ingredients—such as phytochemicals—whose therapeutic action is based on their inherent *Gunas* (properties). [16]

4. Anuvasana Basti

The mucosal layer, being the outermost surface of the intestine, is the first to come into direct contact with the administered *Basti Dravya* (medicated substances). Regular cleansing of the intestines helps nourish the intestinal walls and villi, enhancing the absorption of micronutrients. These nutrients can then enter the bloodstream and reach their target organs. The intestinal mucous membrane is particularly effective at absorbing lipid-soluble components delivered through *Anuvasana Basti*, allowing them to assimilate into the circulation and produce systemic effects. [17]

5. Nasya

Nasya is considered the most effective method for eliminating and alleviating vitiated *Doshas* in the *Urdhvanga* (upper body), particularly when *Kapha* and *Vata* doshas are predominant. *Taila* (oil) is commonly used in *Nasya* therapy for conditions primarily caused by these *doshas*.

- a. The aggravation of *Doshas* in the head occurs due to the irritative effect of the administered drug. This irritation leads to increased blood circulation to the brain, as histamine is released in response to the irritation, causing vasodilation.
- b. The facial vein directly connects to the ophthalmic vein, which then links to the deep venous sinus in the cranial cavity, specifically the cavernous sinus. Since the facial vein lacks valves, there is a possibility of reverse circulation of the *Nasya Dravya* (medicated substance) into the brain circulation. This occurs after the drug is absorbed through the highly vascular

mucous membrane of the nasal cavity. As a result, accumulated morbid *Doshas* are expelled from small blood vessels and ultimately eliminated through nasal discharge and salivation.

c. Additionally, pre- and post-procedure massage and fomentation in the supraclavicular area and the posterior part of the neck help improve local circulation, enhance the absorption of the drug, and relieve local stiffness.

Other allied Panchakarma procedures

1. Udvartana

Udvartana, as described by Acharya Sushruta, produces several beneficial effects, including promoting Preeti (satisfaction), inducing sleep (Nidrakara), enhancing sexual vigor (Vrishya), alleviating Kapha and Vata, relieving fatigue (Shramapaha), improving the condition of muscles, blood, and skin (Mamsa, Rakta, Twaka), facilitating head and body cleansing (Shiramookha Virechana), eliminating body odor (Dourgandha), and reducing excess fat (Meda Vilayana). These effects are achieved through therapies like Samvahana and Udvartana.

After a *Ruksha* Udvartana or *Udgharshana*, *Kapha* is reduced. During this procedure, metabolic waste products are transported by the lymphatic system to the bloodstream and eventually excreted through urine, leaving the body free of toxins and alleviating any sense of heaviness. Procedures like *Udvartana* and *Samvahana* help expel metabolites, including lactic acid, water, and carbon dioxide, thereby reducing fatigue (*Shrama*). The massage action also aids in the breakdown of fat (*Meda Vilayana*). When performed vigorously, the massage emulsifies fat in the superficial connective tissue, and in its emulsified state, the fat globules can enter the lymphatic system, where they are further metabolized. [18]

2. Shirodhara

Shirodhara is a therapeutic procedure that helps bring the mind to a state of tranquility, reducing stress and promoting better mental function. It offers the same benefits as meditation and relaxation.

In today's fast-paced world, finding time to rest and relax is a challenge, as we are constantly exposed to stress and tension. However, lying down in a calm state while practicing meditation can significantly improve our well-being. The *Shirodhara* process induces a meditative effect, which can be particularly helpful in alleviating insomnia and stress-related

disorders. On the other hand, the *Shirodhara* procedure influences the *Yogic Chakras*, specifically stimulating the *Aagya Chakra* and *Sahasrara Chakra*, which are located in the head region. These *Chakras* regulate the body's vital energy. The activation of these *Chakras* leads to improved mental well-being. As a result, *Shirodhara* proves beneficial in managing lifestyle disorders.^[19]

Therefore, *Panchakarma* procedures have proven to be highly effective in managing various lifestyle disorders by enhancing the strength of Agni, which boosts digestive power and improves the absorption of nutrients and medications. As a result, this ultimately increases the bioavailability of both nutrients and drugs.

CONCLUSION

Ayurveda's holistic approach to both physical and mental development has made it a leading non-medicinal solution for various health issues and general discomfort. It also brings about noticeable psychological and spiritual changes, fostering overall improvement in one's lifestyle. Among the most well-known Ayurvedic therapies, Panchakarma is a comprehensive detoxification and purification process. These treatments help maintain a healthy body weight, control hypertension, and leave us feeling lighter, freer, and happier. Additionally, Panchakarma aids in managing stress, anxiety, tension, agitation, irritability, and emotional distress in a more balanced way. By addressing the negative effects of today's fast-paced lifestyle, we can overcome these symptoms and rise above lifestyle diseases more effectively than others. [20]

REFERENCES

- 1. Pappachan MJ. Increasing prevalence of lifestyle diseases: high time for action. Indian J Med Res., 2011; 134: 143-5.
- How Ayurveda is useful in preventing lifestyle diseases. India. [Cited 2018 June 03].
 Available fromhttps://www.lybrate.com/topic/how-ayurveda-is-useful-in-preventing-lifestyle-diseases/c9392cccb4d3590a7f20ef6a693db5d5.
- 3. Vagbhata Ashtanga Hridayam (Text with English Translation, Notes, Appendices and Index) Editor and Translator Prof.K.R.Srikantha Murthy, pages 3-8.
- 4. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sharira Sthana, Katidhapurushiya Shariradhyaya, 1/102-109. Text with English Translation and Critical Exposition Based on Chakrapanidatta's 'Ayurveda Dipika', by Dr. Ram Karan Sharma and Vaidya Bhagvan Dash. 7th ed. Varanasi: Chowkhamba Sanskrit Series Office; 2002.

- 5. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutra Sthana, Arthedashamahamuliya Adhyaya, 30/13. Text with English Translation and Critical Exposition Based on Chakrapanidatta's 'Ayurveda Dipika', by Dr. Ram Karan Sharma and Vaidya Bhagvan Dash. 7th ed. Varanasi: Chowkhamba Sanskrit Series Office; 2002.
- 6. Damle SG. Big Tobacco, Big Food, Big Alcohol "Lifestyle Diseases". Contemp Clin Dent., 2018 Jul-Sep; 9(3): 327-329. Doi: 10.4103/ccd.ccd_580_18. PMID: 30166821; PMCID: PMC6104383.
- Dr. Tiwari Swati, Dr.Gupta Sanjay, Dr. Srivastava Kumar Alek. Role of Panchakarma in preventing lifestyle disorders. J Ayurveda Integr Med Sci., 2018; 3: 141-148. http://dx.doi.org/10.21760/jaims.v3i3.12889.
- 8. Nidhi Choudhury Thesis(2017), Clinical Evaluation Of Virechana Karma In The Management Of Metabolic Syndrome. Rishikul Campus, U.A.U. Haridwar.
- 9. Sushruta Samhita, Ambikadatta Shastri, Ayurveda tatvasandeepika Hindi commentary. Edition: Reprint 2011, Sutra sthana, Chapter 15 Verse 3, Varanasi; Chaukhambha Orientalia; p.73.
- 10. Kajaria Divya, Tripathi J.S, Tiwari.S.K, Utilization of panchakarma in health care: preventive, nutritive and curative treatment of disease. J Pharm SciInnov., 2013; 2(5): 1-5.
- 11. Rajesh war Dutta Shastri et.al. (Ed.). (2005). Charaka Samhita (PP.). Chaukhambha barite academy, Varanasi. Charka sutra 16 verse 22.
- 12. Singh, S. (2015). an Appraisal of Bio-Purificatory and Therapeutic Potential of Panchakarma, International Journal for Pharmaceutical Research Scholars, 4(3): 89-95.
- 13. What is panchakarma? [home page on internet]. India [cited 2018 June 03]. Available fromhttps://www.ayurveda.md/panchakarma/what-is-panchakarma-.
- 14. Sherpa Singh Thesis (2018), Clinical Evaluation of Vamana Karma in the Management of Dyslipidemia. Rishikul Campus, U.A.U. Haridwar.
- 15. Agnivesha, Charaka Samhita, edited by R K Sharma, Bahaman Dash: Edition- reprint. Chaukhambha Sanskrit series office, Varanasi: Siddhi Sthana, 2001; 1(17): 151.
- 16. Bende Yogita, Pawan Lekurwale, Smita Mekhale, Suraj Rathod, Danga SK, Chetan Gulhane. A Critical review on Pharmacodynamics of Basti Chikitsa and its action on Enteric Nervous System International Journal of Ayurvedic Medicine, 2015; 6(4): 301-304.
- 17. An Appraisal of Bio-Purificatory and Therapeutic Potential of Panchakarma Satyapal Singh V-4, I-3, 2015 ISSN No: 2277 7873. Review Article.

- 18. Pulak KantiKar. Udvartana Samvahana Vis-A-Vis Effleurage. Review Article, International Ayurvedic Medical Journal ISSN:2320 5091.
- 19. Pokharel, Sanjay, and Ajay Kumar Sharma. "Evaluation of Insomrid Tablet and Shirodhara in the Management of Anidra (Insomnia)." Ayu 31.1 (2010); 40–47. PMC. Web. 20 June 2018.
- 20. How Ayurveda is Useful in Preventing Lifestyle Diseases [homepage on internet]. India [cited 2018 June 03]. Available from https://www.lybrate.com/ topic/how-ayurveda-is-useful-in-preventing-lifestyle-diseases/c9392cccb4d3590a7f20ef6a693db5d5.