

Chapter-18

Prevention and Management of Cancer through Ayurveda an Overview

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Abstract

Ayurveda, the ancient science of life which is a holistic system of medicine containing concepts for maintaining health (preventive medicine) and concepts of healing (curing diseases) with diet, behavior. Ayurveda gives us several useful concepts on promotion of health thereby prolonging the span of life. Ayurveda consists of two words “Ayu” means life and “Veda” means knowledge, i.e. which gives us knowledge about life. Though we may not find all the description of CANCER available word in Ayurveda, but ancient Ayurvedic classics did mention the clinical features of growths/tumors resembling - cancer by identifying it and naming it like **Gulma, Granthi and Arbuda**. Symptoms, complications, management etc. of Arbuda (cancer) are mentioned in Samhitas of Ayurveda such as Charakasamhita, which mainly focuses on ‘Internal medicine’ and Sushrutasamhita, which mainly focuses on ‘Surgical management of diseases’ etc. Ayurveda tells us about prognosis of the diseases based on their chronicity and complications. Ayurveda is certainly helping as adjuvant therapy in cancer cases which is being established very well i.e. as an adjuvant therapy or co-therapy along with chemotherapy or radio therapy & post operative care. But toxicity caused by them is causing worry to patient and physicians. The usage of drugs such as Aswagandha, Yasthimadhu, Pippali etc. ith Rasayana property can act as antioxidants during such therapies and enhance the effect of therapy by reducing the risk of side effects. Thereby improve the quality of life of terminally ill patients.

Key words: Ayurveda, Tridosha, Svastha, Gulma, Grandhi, Arbuda, Rasayana

1. INTRODUCTION

Globally, there were an estimated 19.9 million new cases of cancer and almost 10 million deaths from cancer recently. The cancer burden will increase by approximately 60% over the next two decades, further straining health systems, people, and communities. The predicted global burden will increase to about 30 million new cancer cases by 2045, with the greatest increases occurring in low and middle income countries.

Because of the present day hectic and fast lifestyle humans are facing different physiological (non-communicable disease like diabetes, cancers, heart disorders etc.) and psychological problems (sleeplessness, stress, depression etc.). This type of individual problems (initially) are becoming social health problems and changing the health scenario globally. Important non-communicable diseases (NCDs) include, Diabetes, Obesity, Hypertension, Coronary Heart Diseases, Rheumatic Heart Disease, **CANCER** and Chronic Obstructive Pulmonary Disorders (COPD).

Ayurveda, advocates code of good personal conduct and Rasayana (rejuvenation) for healthy lifestyle to prevent the diseases. Dinacharya (daily routine) and Rutucharya (seasonal routine) are elaborately mentioned in Ayurveda to advise man to live a happy and enjoyable life which is devoid of any ailment for full span of 100 years. Hence, quite often Ayurveda is referred as ‘knowledge of longevity’.

Ayurveda, the ancient science of life consists of two words “Ayu” means life and “Veda” means knowledge, i.e. which gives us knowledge about life. Ayurveda, which is a holistic system of medicine containing concepts for maintaining health (preventive medicine) and concepts of healing (curing diseases) with diet, behavior.

Though we may not find the entire description of cancer available in Ayurveda, but ancient Ayurvedic classics did mention the clinical features of growths/tumors resembling - cancer by identifying it and named it as **Gulma**¹, **Granthi**², and **Arbuda**.^{3,4,5&6} Symptoms, complications, management etc. of Arbuda (cancer) are mentioned in Samhitas of Ayurveda such as Charakasamhita, which mainly focuses on ‘Internal medicine’ and Sushrutasamhita, which mainly focuses on ‘Surgical management of diseases’ etc. Ayurveda tells us about prognosis of the diseases based on their chronicity and complications.

2. DISCUSSION

The unique holistic approach of Ayurveda in prevention and management of disease is a significant contribution to humanity since time immemorial. It views a Purusha (man/person) as a whole and not as different parts. The diseases are manifestations of humoral imbalance which have to be tackled comprehensively on the psycho-somatic basis.

समदोषःसमाग्निश्चसमधातुमलक्रियाः
प्रसन्नात्मेन्द्रियमनाःस्वस्थइत्यभिधीयते ⁷

Ayurveda describes Svasthya (health), it is a state of physical, sensorial, mental and spiritual equipoising. Acharaya Sushruta stated that a man is Svastha (healthy man) whose Doṣa, Agni, Dhatu and mala are in the state of Satmya i.e., balance or normalcy. He is mentally, sensorial and spiritually in the state of calmness bliss and happiness. This definition essentially touches the state of health in terms of all the four aspects of Ayus i.e., Sharira (body), Indriya (sense organs), Satva (Psyche), Atma (Soul). The opposite of this state is considered as illness. Accordingly, health is the equilibrium of physical, mental and spiritual levels. Thus, the tri-dimensional definition of health propounded by Susruta was the ideal one. ⁸

According to Ayurveda, the normal health is defined as merely a balance of the activities of three doṣa within latitude of normal variations. The conception of the doṣa phenomena in Ayurveda is such that they extend to the entire universe of experience, embracing mind and matter alike. All the physical, physiological and psychological factors are amenable to the doṣa classification and fall naturally into their specific constitutional categories. A man of normal health, 'Svastha', may be defined according to Āyurveda that "Whose Doṣa are in equilibrium, whose digestive capacity and metabolism are proper, whose natural excretions and urges are not suppressed and whose mind, soul and sense organs are alert, is called a man of normal health. "Svasthavrutta" gives the way to maintain and promote the state of health. ⁹

Trayopastambha (diet, sleep and celibacy) are mentioned in Ayurveda as three pillars of the body for good health discussed alaborately. Diet has been given most important place as it plays major role in prevention as well as treatment of diseases. Each and every items of diet is described carefully in Ayurveda along with its effect on the body tissues and relation with Tridosas (Vata, Pitta, Kapha) & Prakruti and also its effects on one's psychological characters like Satvic, Rajasic or Tamasic ¹⁰

Ayurveda advocates that “While taking food one should fill half of the stomach with Anna (solid food), quarter portion with water and leave the remaining quarter empty for free passage of Vāyu, etc.” One should never take food within on Yama (3 hours) following the last meal. This produces indigestion. Do not allow an interval of more than two Yama”. “Eat suitable food, eat moderately and eat at proper time. Always control your Indriya.” There is a vast sphere of dietary rules like these. The depth of knowledge of dietetics both in health and disease possessed by the older generation is really astounding even to this day.

As per the prime objectives of Ayurveda salient features of Dinacharyā, Ratricharyā, Ṛutucharya, Sadvṛutta, Manasika Svasthya and themes/concepts related to Svasthya viz., Agni, Tridoṣha, Srotas, Vega Prakṛuti, Sapta Dhatu, Ahara (wholesome, unwholesome), Nidra (sleep), Brahmacharya (abstinence), Vihara (customary behavior), and concept of Ojas (essence of seven basic elements of body) etc. are elaborately discussed in classical literature of Ayurveda.

Ayurveda offers several guidelines related to Ahara (diet), Vihara (behaviour) which includes day to day activities of man starting from waking up in the morning to going bed for Nidra (sleep) at night. In addition, Sadvṛutta (good personal conduct) also very elaborately described in Ayurvedic texts which will help in maintaining good health by preventing diseases. Ayurveda mainly focuses on preventing aspects of health as mentioned above i.e through diet, behaviour and good personal conduct.

Ayurveda believes all the metabolic activities of body are dependents of Jatharagni (Digestive fire) in the body. If it is in normal state man will be healthy, but when it is deranged health of a man will be afflicted by different diseases.

There are four varieties of Agni described in Ayurveda, viz.

- Sama (balanced): In this state three Doṣha are in equilibrium. It is best, gives happiness and good health by ensuring complete digestion of ingested food without any delay and disturbance
- Viṣhama (erratic): In this state Vata is predominant and leads to disease condition
- Tīkṣhṇa (severe): In this state Agni is severe or excess due because Pitta is predominant and can be compared with hyper metabolism
- Manda (dull): In this state Agni is low or dull and Kapha is predominant. This can be compared with hypo-metabolism and diseases caused are Kapha predominant

Types of Agni: In the human body there are **13** types of Agni.

- Bhutagni (Five elemental fire as per Panchamahabhuta) - 05
- Dhatvagni (Seven bodily constituent fire as per Sapta dhatus) - 07
- Jatharagni (One stomachic or digestive fire) - 01

Bhutagni: Present in the Panchamahabhuta which are source material for all living and non-living.

Dhatvagni: Located in the seven dhatus and bring about the assimilation of the nutrient substances.

Jatharagni: Located between Amashaya (stomach) and Pakvashaya (large intestine); involves the separation of essential or nutritive portion of the digested food from the waste products to be eliminated.¹¹⁵ It is the source of energy synthesis. The fuel for this Agni is food; it is also called Kāyāgni (bodily fire or internal fire).

The digestive fire cooks/digests the food, in the absence of food it digests the Doṣa; when the quantity of Doṣha decreases it digests the Dhātu next, and When Dhatu get digested or lost internal fire can take away the Prana or life of a person.

Role of Agni in Managing Health and Disease

आयुर्वर्णोबलंस्वास्थ्यमुत्साहोपचयौप्रभा|
ओजस्तेजोऽग्नयःप्राणाश्चोक्तादेहाग्निहेतुकाः||¹¹

Acharya Caraka said the span of life, complexion, strength, health, enthusiasm, corpulence, luster, immunity, energy, heat process and vital breath etc. all depend on Jāṭharāgni or body fire.

If Agni is normal man lives healthy; if it is deranged man will suffer from diseases. Hence, Agni is the root cause of all and plays major role in the body.

This concept covers almost all the aspects of life and longevity. Due to improper Agni 'Ama' (undigested material) develops and leads to diseases and considered to be the first causative factor for all the diseases as per Ayurveda.

Longevity depends upon Agni, intelligence, understanding, perception and comprehension are also the functions of Agni. The color of the skin is maintained by Agni. And the enzyme system and metabolism totally depend upon Agni. As long as Agni is functioning properly, the processes of breaking down food and absorbing and assimilating it into the body will operate smoothly.

When Agni becomes impaired because of an imbalance in the Tridosha (Vata, Pitta & Kapha - three humours), the metabolism is drastically affected. The body's resistance to diseases and immune system are also getting impaired. Hence man will become prone for any type of disease whether it is diabetes, heart disease, kidney disease or cancer.¹²

A legendary Ayurvedic scholar from Banaras Hindu University explained the Ayurvedic system of medicine and its beliefs about the pathogenesis and treatment of cancer. He also summarized a retrospective literature review about 85 medicinal plants thought to have anti-cancer effects. Ayurveda, the traditional medical system of India, takes a holistic approach to health and disease. One important difference between Western medicine and Ayurveda is that in Ayurveda, "it is neither possible nor necessary to 'name' every disease because every patient is unique in terms of the nature of his or her illness and its precise clinical presentation and thus the needed treatment," the author explains. Therefore, the treatment is designed to match the nature, or pathogenesis (Samprapti), of the illness, rather than the specific name of the illness (such as cancer or diabetes). The Samprapti encompasses the Dosha (dosha), Dushya, and Adhithana components (humors, body tissues, and seat of the disease, respectively). The author described the sequence of events that occur during the pathogenesis, or Samprâpti, of a neoplasm/cancer. Causative factors, such as Guru (heavy) foods, affect the Jatharâgni (biologic fire of the body). This causes slowed digestion, leading to formation of toxins. Body tissues are adversely affected, leading to stagnation and obstruction of channels. Circulation is altered, which can initiate many disease processes. A benign tumor (Arbuda) may develop and may progress to a malignant tumor.¹³

Ayurveda classified all the diseases in to four categories based on their prognosis.

- If it can be cured easily as "Saadhya" disease
- If it can be cured by putting some efforts and with the help of special treatments like Panchakarma and other procedures- as "Krichra Saadhya" disease.
- If it an not be cured, but can be stopped from further development by using some of medicines and Panchakarma or surgery as "Yaapya" disease.
- If it can not be cured even with all the efforts as "Asaadhya" disease.

It is understood that, Ayurveda can be helpful in the management of Arbuda (cancer) in many ways, as prophylactic, palliative, curative and most importantly it helps to improve quality of life of terminally ill patients.

Ayurveda advocates several guidelines for maintaining health and to manage diseases. These are mainly related to diet, behaviour and good conduct. Dietary modification is another important approach to cancer control. There is a link between overweight and obesity to many types of cancer such as oesophagus, colorectum, breast, endometrium and kidney.

Ahara (Diet) Related Guidelines Advocated by Ayurveda and so on

- Diet cannot be same for all.
- The quantity, type taste etc. vary from individual to individual based on their Prakṛti, Desa, kala, capacity, liking etc. Hence eat as per your Prakriti (nature of body) and which suits your body daily and as per season
- ‘Kalabhojanamarogyakaraṇam’ - timely intake of food is best for maintenance of health or otherwise it leads to formation of ‘Ama’ which is the root cause of all the diseases
- ‘Truptiraharagaṇanam’ - satisfaction is the best quality of food.
- Eat freshly prepared and healthy food timely and at regular timings.
- Don’t eat in excess, but eat as per your Agni (digestive fire) and only after the digestion of previous meal.
- Eat Ahara (diet) which is Pathya (wholesome) and avoid Apathya (unwholesome) Ahara or dietary items.
- Take dinner 3-4 hours before going to bed
- Don’t eat items of only one taste. Consume items of all six tastes (Sweet, Sour, Salty, pungent, bitter and astringent) equally
- Eat as many fruits and vegetables as possible at each meal, and regularly include legumes such as beans and lentils.
- Eat whole grains, such as whole-grain bread, corn tortillas, and brown rice, rather than refined grains such as white bread or rice.
- Avoid sugar-sweetened beverages; drink water instead.
- Limit your consumption of ultra-processed foods, such as sweets, sweetened breakfast cereals, salty snacks, pastries, and cookies, among others. Instead, eat natural foods or foods prepared at home.
- Avoid processed meats, sausages, or cured meats, and limit consumption of red meat.
- Limit the consumption of very hot beverages, such as tea, coffee etc.

Note: There is need to change a lot of present-day dietary habits by adopting AAyurvedic diet and dietetics.

Vihara (Behavior) Related Guidelines

- Following Dinacharya (daily regimen) and Rutucharya (seasonal regimen)
- Daily Vyayama (physical activity) or practice of Yoga Asanas throughout the life and limiting the time of sitting posture one can prevent several types of cancers.
- Avoid alcohol and other beverages
- Avoid smoking (and don't use now available e-cigarettes either, as they lead to tobacco use).
- Achieve or maintain a healthy body weight throughout your life to help prevent several types of cancer.
- Mothers should breast feed babies to prevent breast cancer
- Protect from direct sun exposure during peak sunlight hours and prevent from skin cancer.
- Avoid air pollution by limiting time outdoors.
- Know about occupational health hazards where you are working and take precaution

Note: Vihara -Life style modifications as per Ayurvedic guidelines are the need of the hour

General and Contemporary Guidelines

- Prevent or go for early treatment of infection due to Helicobacter pylori bacteria which can lead to stomach cancer.
- Prevent or go for early treatment of infection with viruses such as hepatitis B and C, human papillomavirus (HPV), and human immunodeficiency virus (HIV) can also cause cancer.
- Get vaccination for children to prevent hepatitis B virus in their first 24 hours of life.
- Get vaccinated which is important at any age if you have not yet vaccinated.
- Go for vaccination of girls and teens against human papillomavirus (HPV), primarily to help prevent cervical cancer, as well as other types of cancer. If available, vaccination for boys also advisable.
- Get tested for human immunodeficiency virus (HIV), and know about the prevention and treatment programs available.
- Females should avoid maximum to undergo Hormone replacement Therapy (HRT) for menopause unless it is compulsory, because HRT can cause breast cancer.
- Cancer can be controlled and cured if it is detected and treated early hence; people who are between the ages of 40 and 74 should go for an early detection test for colon and rectal cancer (fecal occult blood test or

colonoscopy). Women of 40 years of age or older, should go for breast examination by mammogram every two years.

- Sexually active women between the ages of 30 and above should go for a molecular human papillomavirus (HPV) test at least every 5–10 years for early detection of cervical cancer.

Ayurveda is certainly helping as adjuvant therapy in cancer cases which is being established very well i.e. as an adjuvant therapy or co-therapy along with chemotherapy or radio therapy and & post operative care. Ayurvedic herbs and formulations can help cancer patients as adjuvant or co-therapy along with chemotherapy or radio therapy which are known and established management for cancer. But toxicity caused by them is causing worry to patient and physicians. The use of drugs with Rasayana property which can act as antioxidants during chemotherapy enhances the effect of therapy by reducing the risk of side effects. Ayurveda helps cancer patients.

Ayurvedic drugs minimize the side effects of the available conventional therapies. May also help in reducing the therapeutic dose of the various therapies. For example studies on cow urine. Can be helpful in targeting the specific tissues as in some studies on nano-particles of gold. Slower the progress of the cancer, when chemotherapy, radio therapy or surgery is contra-indicated due to many reasons and patients have no other choice.

Drugs with property of protecting cells are used for Rasayana therapy. They improve comfort and the quality of life for individuals with cancer. Most common drugs used for Rasayana therapy have pacifying effect on Tridoshas (Vata, Pitta & Kapha). Rasayana (rejuvenation) is one of the eight branches of Ayurveda. Rasa (end product of digestion which nourishes the body tissues and is concerned with revitalization and energy giving. Thus, Rasa nourishes our body, boosts immunity and helps to keep the body and mind healthy.

Commonly used Rasayana drugs are, Triphala (Combination of Terminalia chebula, Terminalia bellerica & Embellica officinalis); Guduchi (Tinospora cordifolia); Pippali (Piper longum); Bhallatak (Semicarpus anacardium) and Punarnava (Boerhavia diffusa), Yashtimadhu (Glycyrrhiza glabra).

Rasayana (rejuvenation) therapy enriches rasa with nutrients to help one attain longevity, memory, intelligence, health, youthfulness, excellence of luster, complexion & voice, optimum development of physique and sense organs, mastery over phonetics, respectability and brilliance.

In fact, herbs and formulas with Rasayana property are similar to adaptogens but although the categories overlap, they are not identical. Adaptogens are nontoxic herbs that work in a nonspecific way to balance the normal physiology of the body, by acting upon the HPA axis and the neuroendocrine system. Rasayanas also overlap with tonics but are amphoteric in that they will not over-tonify organs.¹⁴

There are several plant based and mineral/metal based formulations which have shown very impressive effect to protect body from the side effects (of chemo and radio therapy) like Alopecia, Nausea, Nail changes, Constipation, Anorexia and Vomiting. Myelo-suppression one of the fatal toxicity of chemotherapy led to delay in the schedule of chemotherapy. Now a days patients who are receiving the Ayurveda treatment along with Chemotherapy have also shown more regularity in maintaining the chemotherapy cycles as the hematological levels can be maintained up to normal state. More than 50 research works have been carried out at M.D. and Ph.D. level on cancer at various Ayurvedic institutes including Gujarat Ayurveda University, which has shown the very effective action as chemo-preventive radio-preventive agents.¹⁵

There is need to work further to establish biomarkers to assess the effect of Rasayana therapy in terms of apoptosis. Cyto-protection, cell recovery, anti-neoplastic activity and vital of all immune augmentation.¹⁶

Organ Wise or System Wise Cancers and Useful herbs/Formulations as per Ayurveda are given here

- Cancer afflicted brain- Shatavari (*Aparagus recimosus*), Yashtimadhu (*Glycyrrhiza glabra* -licorice), Mandukaparni (*Centella asiatica*) & Kastoori Bhairav Rasa, Brahmi Vati, Smritisagarras etc.
- Oropharyngeal cancers- Pathyadi kwath, Varunadi kwath, Kaishoraguggulu, Kasamarda (*Cassia occidentalis*), Mahalaxmivilas Rasa etc.
- Lung cancers – Mallasindura, Samirpannagarasa, Kantakari (*Solanum xanthocarpum*), Vasaasava, Kanakasava, Chitrakaharitaki avaleha, Bhallatakavaleha, Pippali (*Piper longum*), Hirak Rasayana etc.
- Stomach Cancers- Shatavari (*Asparagus resimosus*), Amlaki (*Phyllanthus ambluca*), Kumari (*Aloe vera*), Changeri Ghrita, Mahakalyanaka Ghritam, Bhoomyamalaki, (*Phyllanthus niruri*), Avipattikara Churna etc.
- Intestinal Cancers- Shigru (*Moringa olifera*), Panchamrit parpati, Brihad Gangadharachurna, Kutajaghanavati, Kutaja avaleha, etc.
- Female genital Cancers- Ashoka (*Saraka asoka*), Mukta panchamrita rasa, Phala Ghrita, Dhanvantara Tailam etc.

- Male genital Cancers- Shilajit (resin found in rocks of Himalayas), Vanga bhasma, Chandrodaya Rasa, Chyawanprash, Triphala, Makardhvaja etc.
- Liver Cancers- Bhumyamalaki (Phyllanthus niruri) Bhallataka (Semicarpus anacardium), Triphala, Guduchi (Tenospora cordifolia), Arogyavardhini Vati, Phalatrikadi Kwatha etc.
- Blood Cancers- Somala Bhasma, Ashwagandha (Withania somnifera), Samirpannaga rasa, Anantmula (Hermidesmus indicus)-Suvarna Vasant Malti Rasa etc.
- Bone Cancers- Aabha Gugglu, Madhumalinivasantarasa, Sariva (Hemidismus indicus) etc.
- Breast Cancer – Gojivha (Onosma bracteatum), Chinchabhallataka, Jivaniya gana plants (10) etc.
- Skin Cancers - Manjishtha (Rubia cordifolia), Sameerapannagarasa, Kaishoraguggulu, Gandhakrasayan etc.

Ayurvedic Single Drugs and Formulations Useful for Symptomatic Relief in All Types of Cancers

- For pain relief & to reduce tumor size - any Guggulu preparation
- For treating nausea and vomiting- Shatavari, Chhardiripu vati, Sutshekhararas etc.
- For controlling recurrent infections -Gandhak Rasayan, Mahalaxmivilasaras etc.
- For controlling loose motions- Bilva (Eagle marmeolos), Kutaja (Holerina antidysentrica), Tankan (borax) etc.
- For treating pain abdomen- Shankhavati, Aamapachanavati, Shigru (Moringa oleofera), Chitrakadivati etc.
- For headaches- Pathyadi Kwatha, Navajivana Rasa, Shirashooladi vajra rasa, etc.
- To treat jaundice -Phalatrikadi Kwatha, Katuki (Picroryza curroa) , Triphala, Beejapuraka, trikatu (Combination of three pungent drugs- Shunti- Zingiber officinalis, Piper longum & Piper nigrum) etc.
- To control epistaxis, bleeding- Praval panchamrit, Vaasa and goat milk etc.
- To treat pain in bones- Ashvagandha tailam, Guggulu (Comiphera mukul), & Abha+Madhumandura etc.¹⁷
- Yashtimadhu (Glycyrrhiza glabra) is useful in side effects of radiation/ chemotherapy in Head and neck malignancies ¹⁸
- Kalonji (Black seed -Nigella sativa) has anti-cancer activity.¹⁹

As per Ayurveda all the diseases are caused due to vitiation of Tridosa (three humors). Thereby management of those diseases should be on the lines of pacifying the Dosha which is more dominant first and later on efforts are to be

made to bring the dosas to normal state. Thus in cancers also treatment should be based on predominant dosha. Single drugs specific to pacify that particular dosa are to be prescribed initially and if required in combination.

Sodhana chikitsa (purification process), which eliminates vitiated doshas, have been primarily used for medical management of cancer. When both internal and external medications were given then it is called as Panchakarma chikitsa. The other type of curative therapy is called Shamana chikitsa, which pacifies dosha and gradually relieves the disease. However, this treatment is prescribed only to weaker patients for whom Shodana chikitsa is contraindicated. In Rasayana prayoga (immunotherapy), certain poisonous plants, mercury like metals and animal products were rendered non-toxic and harmless by the use of alchemy and are used as rejuvenating drugs. Other methods of treatment include, Dhatwagni chikitsa (correction of metabolic defects), Vyadhipratyanika chikitsa (specific anti-cancerous drugs) and lakshanika chikitsa (symptomatic treatment).²⁰

Several famous organizations in India and abroad are trying to find the added solutions for the management of cancer for example The Central Drug Research Institute (CDRI), Lucknow started in 1964, a programme for the screening of plant extract for a wide range of biological activities. CDRI has found out about 70 plants whose anti-cancer activity has been confirmed. In addition to this some of common drugs mentioned in Ayurveda like Ardraka (*Zingiber officinalis*) Tagar (*Valeriana wallichii*), Anantamula (*Hemidesmus indicus*), Bala (*Sida cordifolia*), Saptaparna (*Alstonia scholaris*), Shallaki (*Boswellia serrata*) etc. have been reported for anti-tumor efficacy by several researchers.²¹

A few Ayurvedic formulations (herbo-mineral) useful as adjuvant with conventional treatment of cancer with Radio & Chemo therapies include: Triphala Rasayana, Chyawanprash, Aamalaki Rasayana, Amrit Rasayana, Brahma Rasayana, Kamdudharasa, Laxmivilas ras, Makardhwaj vati, Mukta Panchamrit rasayana, Narikela Paak, Navjeevanras, Navratnaras, Navratnakalp, Panchamritras, Smritisagarras, Suvarnavasantamalti, Vasantkusumakararas, Brihat Vangeshwararasa, Chandanadi churna.²²

3. CONCLUSION

Combination of Ayurveda and other any traditional knowledge along with available medication by conventional system i.e. multidisciplinary approach for treatment of cancer and/or any other dreaded disease is ideal.

One should adapt beneficial health guidelines irrespective of the medical system whether it is of Ayurveda, Unani, Homeopathy, Yoga & Naturopathy, Rieki, modern medicine etc. or any other system of medicine with nil or minimal side effects but with more benefits and cost effective. Physicians of all these systems should feel the personal/public health as their prime responsibility and guide the citizens in maintaining the health and bring awareness amongst them on the benefits of good health and also about all the health policies of governments. This is essential for the personal hygiene and social hygiene which ultimately reflect on the overall health of a society and nation.

Maintenance of health mainly depends on six levels i. Individual level ii. Society level iii. Non-government organizations (regional/National) iv. Private and government participation (regional/National) v. Government policies (State/National level) vi. WHO initiatives and guidelines (international level).

Ayurveda is certainly helping as adjuvant therapy in cancer cases which is being established very well i.e. as an adjuvant therapy or co-therapy along with chemotherapy or radio therapy and & post operative care. Ayurvedic herbs and formulations can help cancer patients as adjuvant or co-therapy along with chemotherapy or radio therapy which are known and established management for cancer. But toxicity caused by them is causing worry to all especially to patients and physicians. The use of drugs with Rasayana property which can act as antioxidants during chemotherapy enhances the effect of therapy by reducing the risk of side effects.

Dietary modification is another important approach to cancer control. There is a link between overweight and obesity to many types of cancer such as oesophagus, colorectum, breast, endometrium and kidney.

Finally To conclude it is wise to accept the fact that “though modern advancements are welcome, but one should not forget the benefits of ancient knowledge of Ayurveda which has its prime objectives i. “Svasthanya Svasthya Rakshanam” (preserving the health of healthy) and ii. “Aturasya Vikara Prashamanam” (providing the treatment to sick) with more stress on the prevention of diseases. For achieving this goal periodical screening of the population for dreaded diseases like cancer and lifestyle disorders and other Non-communicable diseases bringing awareness amongst the people is the only solution for early detection and successful management. The physician should also play different key roles of a philanthropist, philosopher, health educator, advisor, dietician, pharmacist, counselor etc. and most importantly should act with social responsibility like in earlier days.

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