Role of Ayurveda *Dincharya* in Prevention of Infectious Diseases with special reference to Covid 19

Zoya Hasan Khan¹, Trupti Thakre², Sourabh G. Deshmukh³

¹Mahatma Gandhi Ayurved College, Hospital & Research Centre, Under Datta Meghe Institute Of Medical Sciences, Wardha - 442001, Maharashtra, India
²Department of Kaumarabhritya, Mahatma Gandhi Ayurved College, Hospital & Research Centre, under Datta Meghe Institute of Medical Sciences, Wardha- 442001, Maharashtra, India
³Department of Kayachikitsa, Mahatma Gandhi Ayurved College, Hospital & Research Centre, Constituent College of Datta Meghe Institute of Medical Sciences, Wardha – 442001, Maharashtra, India

**Article History:**

Received on: 22 Jul 2020
Revised on: 23 Aug 2020
Accepted on: 24 Aug 2020

**Keywords:**

COVID19, Daily regimen, Disinfection, Food items, Health, Lifestyle disorders

**Abstract:**

Health means not only the freedom from disease but its ability to work with self-control and satisfaction. According to WHO health is to define as a state of complete physical, mental and social well being and not merely the absence of disease. Social and cultural pressures can only be endured by a healthy individual. Health is only the factor which helps to achieve *Dharma* (Attain Pious) *Artha* (Wealth) *Kama* (Desire) and *Moksha* (Salvation). As per Ayurveda, proper lifestyle or the person following *Dinacharya*, Ritucharya explained by acharya having disease-free life. The ideal lifestyle or routine or various duties from day to day in a day called daily regimen (*Dinacharya*). Recently Ayush Ministry has given some measures has to be taken in *Dincharya*. These measures include *Dhupana* by *dravyas* having antiseptic and antimicrobial properties then, installing *taila* or *ghrita* in both the nostrils (*Pratimarsha Nasya*) at morning and evening helps to boost immunity. This practice acts as the first line of defense against the destabilizing influences of an external environment and will improve the condition of health. But most importantly, it will increase positivity in one, which is the prime requirement of the person dealing with COVID 19 patients. This should be the practical approach in the condition like atmosphere full of COVID 19 virus; One should always wear clean clothes and never share with others. *Graha Dhuma* is a unique technique mentioned in the texts for disinfecting the rooms. If all these daily regimens follow strictly, can help to prevent the spread of pandemic like covid-19.

**INTRODUCTION**

Health is a state of complete physical, mental, spiritual and social wellbeing and not merely the absence of disease (Park, 2005). Ayurveda emphasis the importance to maintain the health of a healthy person and curing the disease of a sick person (Yadavji, 2011). So, to maintain the health of person some physical activities are mentioned in Ayurveda called the term *Dinacharya*. By following those daily regimens mentioned in Samhita, a person will able to live a healthy life. As per Ayurveda the man is said to...
be healthy (Swastha) whose body humors (Dosha), tissues (Dhatu), digestive system (Agni) and excretory products (Mala) are all in the state of equilibrium along with normal mental status and spiritual pleasantness and happiness (Yadavji, 2011). In the crisis of corona virus or any other infectious outbreak, the self-protective measures to be applied are done by following Dincharya. During the pandemic outbreak, the first and foremost objective for an individual is maintaining hygiene or cleanliness this could reduce almost 70% risk of gaining the infection. Some of the measures involved in Dincharya are about keeping and maintaining a healthy lifestyle. To become healthy is not just about physical fitness but also the mental status of a person.

Nowadays people are suffering from various diseases due to the sedentary lifestyle, the stressful, busy, lack of exercise, lack of sleep, lack of nutritional diet and thus the last thing to be done is by changing the lifestyle. To maintain a good lifestyle, all the risk factors of gaining the disease come to lesser risk. Waking up early in Bhrama muhurat and exposure to bright light in early morning results in the release of serotonin (neurotransmitter Biochemically derived from tryptophan) which contributes to feelings of well-being and happiness and keeps the person active and alert. Since our bodies are naturally tuned-in to the rising and setting of the sun, the ideal time to wake up is at dawn. This allows the cells in your system to soak up the tempered rays of the sun and get charged for the day ahead. So only those individual can achieve the Moksha (salvation) in life, having a healthy or sound body with a sound mind and the disease-free body.

MATERIALS AND METHODS

Various Ayurvedic classic texts like Charaka Samhita, Sushruta Samhita, Ashtang Samgraha, Ashtang Hridaya, Bhavaprakasha were used as source materials. Apart from this, websites and modern books on preventive and social medicine were also searched for this review.

OBSERVATION

The measures of self-protection given by AYUSH ministry remain to be same of Ayurvedic texts Dincharya. Following up schedule and making it perfect by maintaining Dincharya can give wonderful results to your health. Many diseases are caused due to poor lifestyle choice such as chronic stress, obesity, type 2 diabetes mellitus, cardiovascular diseases, malnutrition; any infectious diseases can be caught up by easily due to poor lifestyle. Non-communicable disease diseases kill around 40 million people each year, that is around 70% of all death globally. NCDs are the combination of factors including genetic, physiology, environment and behaviors. The recent case of COVID19 in India has given many death results due to low immune of the patients. Everyday cases of corona virus are increasing, the classical method which can be used is following the Ayurvedic daily regimens. Lifestyle being good acts as a synergist for good health and a poor one for poor health.

DISCUSSION

Bramhe Muhurta Uthishta (waking up before sunrise)

Since we all know the circadian cycle have a particular naturally tuned system for waking up and sleeping times in our body. The person should get up early in the morning before the rising of the sun (Sharma, 2006). Performing meditation at this time in early morning sun rays normalize the hyper-activity of hormones and activates the mind. Exposure to bright light in the early morning causes the release of serotonin (neurotransmitter Biochemically derived from tryptophan) which contributes to feelings of well-being and happiness and keeps the person active and alert (Figure 1).

Figure 1: Benefits of early waking

Ushnajalapana (Drinking lukewarm water)

Drink Water in the Morning- After the Achamana (to wash) means after cleaning the excreta and washing of hands and face after each travelling and toilet
Figure 2: Benefits of Drinking Water

Figure 3: Traditional Toothbrush

Figure 4: Method of scraping tongue

Figure 5: Dhumpana

Figure 6: Gandusha

Figure 7: Dhupana

Figure 8: Nasya

Figure 9: Pranayama

Figure 10: Meditation

Figure 11: Abhyanga

Figure 12: Vastra Dharana

Figure 13: Healthy Diet
helps to maintain hygiene and microbes free body likewise drinking of lukewarm water in the morning before wash helps to flush out any toxins that may have accumulated in your body overnight. This water helps to clean the GIT system, cleanse the kidneys, and activates peristalsis. Many people have a habit of starting a day with tea or coffee, which is not good for health. As tea disturbs the metabolism which results in constipation which is the cause of diseases or a day start with a mixed drink disturbs the body mechanism. So, start your day by taking a glass of lukewarm water makes your mind/body pleasant. After drinking, water eliminates the body waste and satisfactorily eliminating your waste gives an indication of your good digestive system. Timing of Drinking Water in the morning: Dawn — a few minutes (about 20-30 minutes) before sunrise (Figure 2).

**Dantadhawant (Brushing your teeth)**

Brushing your teeth or cleaning teeth with a soft toothbrush and an astrigent, pungent, and bitter toothpaste/powder or with the barks of *Khadir, Ark, Karanja, Vata and Arjuna* like astrigent plants should be used for brushing which makes mouth cleanse and refreshing for the day. The traditional Indian toothbrush (Figure 3) is a Neem stick, which dislodges fine food particles from between teeth and makes strong, healthy gums. Licorice root sticks are also used. Roasted almond shell powder can be used in *Vata* and *Kapha dosha* person, and ground Neem for *Pitta*. Also, this brushing of teeth brings freshness, takes away the bad odour, coating of teeth and create the desire of food.

**Jivhanirlekhana (Scrape your Tongue)**

According to Acharya Gently scrape over tongue from the back to forward by tongue cleaner made up of gold, silver or iron stimulates the internal organs, helps in digestion, and removes bad odour and dead bacteria. Ideally, *Vata* dominant *Prakriti* person can use a gold scraper, *Pitta* dominant *Prakriti* person can use a silver one, and *Kapha* dominant person can use copper. Now a day, stainless steel can be used by all people in routine (Figure 4) due to the easy availability and cheap rates.

**Dhumpana (Medicated Smoking)**

To prevent the onset of diseases one should inhale herbal smoke (Dhumpana) daily with *Dhumpana Dravya* like *Haridra, Yashtimadhu, Shallaki, Laksha, Udumbara and Tagara* etc. which are lightened with fire, releases the smoke (Figure 5). There are three types of *Dhumpana* among which *Madhyam Dhumpana* is best for *Vata* and *Kaphahara*. It also gives strength to the throat and improves voice. Thus, smoking with medicated herbs like by its antimicrobial action helps to clean the Respiratory tract, including the pharynx and oral cavity.

**Gandush/Kaval (Gargling)**

Gargling twice a day with warm sesame oil will improve voice, remove wrinkles from cheeks, strengthening teeth, gums, and jaw also increase appetite and prevents dryness of mouth and throat. *Sheetaambu gandusha* acts as *Kaphahara* while *Sukhoushnambu Gandusha relives Mala, Asyavairasya* and *Kapha Praseka*. This procedure, as shown in Figure 6 should be routinely performed daily after mouth washing.

**Dhupana (Fumigation)**

According to Acharya Kashyapa *Dhupana* (Figure 7) is defined as the fumigation which is carried out by using the fine powder of some universal *Dhupana* dravyas like *Neem, Vacha, Tagar, Hingu, Pipali, Sharshapa, Ashwagandha* with ghrita with the intention of *Nirjantukarana (disinfection)*. This fumigation is very helpful to prevent the diseases by disinfection of a particular place. Fumigation a Latin term which constitutes of two words ‘fumus’ means smoke and ago means to drive away. *Dhupana* therapy is used for Disinfection, *Dhupana* is performed in the following areas –

1. Vrana (wounds)
2. Karna (diseases of ears)
3. Nasya (diseases of nose)
4. Guda (diseases of anal region)
5. Yoni (diseases of vagina)
6. Gatra (on whole body)

Any steam therapy can also be used steam of *Pudina* leaves (mint) or *Ajwain* (caraway seeds) can be practiced once in a day. This method was given in the measures of self-protection in the crisis of COVID19 presented methods was by Ayush Ministry (2020). This *Dhupana* can be done in house for disinfecting rooms and for protection against pandemic like COVID19. This *Dhupana* is known as *Graha Dhupana*.

**Nasya (Installation of medicine in nostril)**

Applying sesame oil or *ghrita* in both the nostrils (Pratimarsha Nasya) (Figure 8) in morning and evening helps to increase the immunity. This was the method given in our text for treating *Urdhva-jatrugata Vikar* and for boosting immunity which was now given by Ayush Ministry (2020). The nasal
route is the best route for tackling Shiroroga diseases.

Time of Nasya administration,

1. In diseases of Kapha: forenoon
2. In diseases of Pitta: mid-noon
3. In diseases of Vata: afternoon

Vayyama (Exercise)

Acharya charak defined Vyayama is nothing but any physical activity which is desirable and capable of bringing the body strong; stout especially helps to improves circulation, strength, and endurance. It also keeps one relax and have a sound sleep and improves digestion and elimination. According to Ayurveda, the consequences resulting from physical exercise do not only bring a lightness of body, but it helps to remove all imperfection and augmentation of the digestive fire. Hence, it is said that Vyayama has both the curative and preventative values.

Pranayama

The basic vitality necessary to live is prana, and regulation of this prana is pranayama. Breath regulation (pranayama) include modulation of the pace of breathing viz. slowing down or pacing the breath, chanting humming sound and retention of breath etc. some studies are found on different types of yoga breathing practices explained in Hathyyoga like Kapalbhati, Bhramari which found successful in influencing the neurocognitive abilities, autonomic and pulmonary functions as well as biochemical and metabolic activities in the body.

After exercise, sit quietly and do some deep breathing exercises (Figure 9), which helps to balance the bodily humors are as follows:

1. for Vata - 12 alternate nostril breaths can be done
2. for Pitta - 16 Shitali breaths (curling up your tongue lengthwise and breathing through it);
3. for Kapha - 100 Bhasrika (short, fast breaths)

All these Pranayama improves the overall performance of body, increases chest wall expansion and almost all lung function by making efficient use of abdominal and diaphragmatic muscle and improve the respiratory musculature which results in prevention of Respiratory Diseases like covid-19.

Meditation

Meditating every morning and evening at least 15 minutes is very important. Trying the “Empty Bowl Meditation” can be helpful. Meditation brings balance and peace into your life. It makes good memory and concentration power for the people. Meditation (Figure 10) is nowadays advised for getting peace and maintaining health. For patients dealing with hypertension, angina, diabetes, loss of memory, low concentration, and stressful people should be regular with meditation for a good state of mind. But most importantly, it will increase positivity in one, which is the prime requirement of the patients dealing with COVID 19 patients.

Abhayanga (Massage)

A regular oil massage (Figure 11) with warm oil works best for everyone or any skin. Daily massage with the oil made up of specific herbs is beneficial for maintaining good health. This massage can be incorporated as a routine before bath makes skin supple and restore the balance of Dosha and enhance well being and longevity. Some studies proved that the Abhyaanga helps to increase blood circulation by its Guru, Shita, Drava, Picchila, Vyavahi, Snigdha and Manda properties. It also promotes strength and encourages quicker removal of metabolic waste or toxins and relaxes the body. The massage on the body can be done stepwise by following the direction of hair growth by using medicated oil like Ksheerbala Taila, Dashmool Tails and Tila Taila by keeping the comfortable pressure. It starts from the head, sole, ear, nose and then the whole body. The head massage took place an important role in abhyanga as brain control the whole body and abhyanga increased the cerebral blood flow and reduced the level of stress-related hormones with the concomitant increase in circulating lymphocytes which keeps the body healthy and strong (Rao, 2018).

Vastra Dharana (Dressing)

As per Acharya, proper dressing gives libido, fame and longevity of life. It means we should wash our clothes after once used because some studious showed that the viruses could stay on particular surfaces like cloths for a particular time, so the cloth is also one of the carriers of infection. The person who worked at places like Covid hotspot, hospitals, PHC, clinics etc. should wear disposable PPE kit as shown in Figure 12, Face shield, face mask etc. This habit of taking care by proper dressing can prevent the spread of infection.

Ahar (Lunch & Dinner)

In Ayurveda, the food is elaborately explained by Acharya. As per Acharya the one should take a diet two times a day which should be warm and Snigdha in Guna. The food should be taken prop-
erly in a comfortable place without talking. The food must be healthy like cereals, sprouted cereals, puffed rice, buttermilk, green leafy vegetables, whole fruits etc. also, have sufficient water such as 3 to 3.5 lts/day. Food must always be decided upon one’s Prakriti because it affects one’s metabolism.

As shown in Figure 13, A full diet must always contain six Rasa (Madhur, Amla, Lavana, Katu, Tikta and Kashaya) (Trikamji, 1992) as it will help to boost your mind and body immunity. Eating mindful and with concentration means one should be concentrated towards food that there should not be any talking, laughing, or any other distractions. Eating slowly or eating fast and eating before the previous food is digested will disturb the metabolism. Spices including Haridra (turmeric), Jeera (cumin), Dhaniya (coriander), Lahsun (garlic) should be used in the diet daily. All these measures about diet help to maintain the metabolism properly, increase immunity, strength and complexion.

**Nidra (sleep)**

*Nidra* is one of the main pillars of good health and a good life in Ayurveda that endows the body with strength, complexion and healthy growth that continues throughout life. Proper sleep at night leads to happiness, nourishment, strength and virility. Acharyas said that the day sleep should be taken by only Vata Prakriti, and Pittaj Prakriti but not by Kaphaj Prakriti person because it will increase the Kaphaj Guna. This leads to Dhatusamya, balances dosha, promotes good vision, complexion and improve digestive fire. Also, Acharya said that insufficient sleep could disrupt the circadian rhythm and triggers metabolic diseases that result in negative health outcome, including cognitive impairment.

**CONCLUSION**

The Ayurveda principles and practices can potentially become relevant for designing an integrated health care strategy. This creates the best regime to follow at the time of COVID 19. These measures or lifestyle is for living a better life and a healthy life. This could prevent us from many diseases and also infective diseases. India is known for it’s traditional in the time of crisis where noble coronavirus is spreading very fast, and the only way to keep ourselves safe is fighting with the virus with strong immunity. There was a reason our ancestors followed these regimens. India has a great culture and a golden tradition which was given by many great Acharyas. Hence, maintaining our daily life and following Dinchariya will give a great impact on the body and immunity.

**ACKNOWLEDGEMENT**

"A great teacher is not simply one who imparts knowledge to her students, but one who awakens their interest in it and makes them eager to pursue it for themselves."

I acknowledge the full cooperation and encouragement of my guide Dr Trupti Thakre Assistant Professor, Department of Kaumarbhritya, MGAC for sparring her precious time. I came to know about so many new things while completing this article.

**Conflict of Interest**

The authors declare that they have no conflict of interest for this study.

**Funding Support**

The authors declare that they have no funding support for this study.

**REFERENCES**


