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Preventive measures for COVID 19 through Dincharya and Rutucharya mentioned in Ayurvedic Text

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ABSTRACT



In recent two decades, SARS, MERS and Covid 19 are the most infectious diseases spread all over the world, and are spread through the same virus called a Coronavirus with different features. Mostly this virus affects the respiratory system and has symptoms like high-grade fever, cough, headache, respiratory distress. It is affecting not only on the health level but also at the psychological and economic levels. Infectious diseases like these can be easily prevented by following some rules in our daily routine. The preventive measures given by the world health organisation (WHO) to avoid this infection are washing hands frequently, using masks, maintaining social distancing. All these preventive methods are already depicted in Ayurveda texts. Pursuing the Dincharya (daily routine) and Rutucharya (seasonal routine), mentioned in the Samhita is the best way to avoid the diseases caused by any changes experienced in the environment, also by following these rules disease can be prevented. Dincharva is the procedures which should be followed in day to day life, but Rutucharya is about the procedures which should be followed by the person as per the season. As per Ayurveda regular use of these rules and regulation helps to maintain the balance of Dosha (an essential constituent) by which diseases can be prevented. So this study is about the methods which will be helpful to avoid Corona infection by following the simple daily routine and seasonal routine.

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INTRODUCTION

Coronavirus is an ongoing pandemic all over the globe. On 11th March 2020, WHO has apprehended it as Pandemic disease (health organisation, 2020a). It is a zoonotic type of Disease caused due to the genus Betacoronavirus and subcovirus which are derived from bats. It is one of the highly infectious diseases caused due to droplet infection, Fomites, tablets and metals (health organisation, 2020b). The definition of Infectious diseases is already given in Sushrut Samhita (Naiker and Rao, 2017). According to this, infectious diseases can be prevented by avoiding contact with the affected persons. So governments are also taking the first preventive measures like home quarantine, isolations, lockdown at

home. Though these measures are most effective to stop the spreading of the diseases, due to improper lifestyle, an individual can suffer from other diseases in the home. , Ayurveda provided different protocols in different season along with the day to day activity

These protocols can be easily implemented in day to day life to prevent not only infectious diseases but also all types of conditions. Following protocol, Acharyas have given Dincharya (Daily living style) (Chaudhary et al., 2018) and Rutucharya (Seasonal living style) (Twinkle et al., 2020). If these two things are being implemented in life, then no disease can touch you. Ayurveda is a life science and ensures you with a healthy lifestyle. Dincharya includes waking up at Bramhamuhurta (One and a halfhour before sunrise), Dantdhavan (Brushing teeth), Nasya (Oleation through nasal route), Abhyanga (Oleation of the body), Vyayam(exercise), Snana (Bathing), Sharirshudhi (Cutting nails, hairs, keeping the cleanliness of private parts). In Rutucharya, there is a protocol given by the respective Acharyas for each Rutu (Season). There are six seasons in Indian subcontinent viz Shishir (winter), Vasant (spring) Grishma, (summer) Varsha, (monsoon) Sharad (autumn) and Hemant. (pre-winter). The bodily constitution of Doshas (primary constituents) varies in every season. Thus, the demand for body changes according to the Dosha condition of the body at that time. If the Rutucharya is instigated properly, the vitiation of Doshas can be prevented. Acharya has given a different line of treatment for different Dosha, according to Rutu. Vaman (therapeutic emesis) is advised in Vasant Rutu (spring) for Kaphaprakop (Kapha vitiation) Virechan (purgatives) is suggested for Pitta prakop (pitta vitiation) in Sharad Rutu (autumn) and Basti (Medicated enema) is advised for Vataprakop in Varsharutu (Asthana et al., 2018).

Sushruta has defined a healthy individual. The individual having Samdhatu (in seventh homeostasis elements), Samagni, (homeostasis of bodily fire) Samdosha (homeostasis of constituents factors), Sammala (homeostasis of product), Prasannaatmendriya (wellbeing of the soul) and Prasannamana (mental well being) is called as Healthy Individual (Basisht, 2014). The implementation of Dincharya and Rutucharya is highly essential to maintain a healthy state. If this lifestyle is being implemented no disease can easily attack you. The primary purpose of Ayurveda is not only the treatment of Disease but prevention also (Patwardhan, 2014) Thus for the sake of maintaining health the protocols of Dincharya and Rutucharya are compiled in this article.

Aims and Objectives

To find out Preventive measures for COVID 19 through Dincharya and Rutucharya mentioned in Ayurvedic Text.

Objectives

- 1. To study the About Dincharya and Rutucharya mentioned in ayurvedic text
- 2. To analyse the methods mentioned in Dincharya and Rutucharya for prevention of Covid 19

MATERIALS AND METHODS

Brihat-trayee with their commentaries, supportive text of contemporary science, references from internet and journal were appraisal for the

Review of literature

Methods used in Dincharya (daily routine)

Waking up early in the morning, Brushing, Installation of oil in nostrils, keeping mouthful of water, decoction or oil for a particular time, massaging with oil, exercise, bathing and then taking Breakfast or meal is the standard protocol for the daily routine [Figure 1], (Chaudhary et al., 2018).

Rutucharya (Seasonal routine)

There are six seasons in the Indian subcontinent. In Ayurveda, there is a brief description regarding indications and contraindication of each season, which is useful for maintaining the equilibrium of the Doshas, which further helps in avoiding the diseases caused due to change of environment. The different indication and contraindication mentioned in different seasons are as follows (Twinkle *et al.*, 2020).

Hemant Rutucharya (Pre-winter)

According to Ayurveda in Hemant rutu, there is an accumulation of Kapha Dosha (Naiker and Rao, 2017). So to avoid further accumulation of the Doshas suitable food regime and the behavioural system is mentioned in Samhitas which further controls the accumulated Kapha without any medication [Table 1], (Twinkle *et al.*, 2020).

The daily routine in Shishir Rutu is same as Hemant. Only the special one is depicted in the following. In Ayurveda, Acharya mentioned that the food regime and behavioural regime is the same as Hemant rutu [Table 2], (Twinkle *et al.*, 2020).

Vasant (Spring)

In Vasant rutu, there is Kapha prakopa. (Naiker and Rao, 2017) So to equalise the Dosha in body, the food and behaviour regime is advised [Table 3], (Twinkle *et al.*, 2020).

Table 1: Indication and contra-indication in Pre- winter

| Indications | Contra- Indications |
|---|--|
| Ahara (Food regime) – Snigdha (unctuous) Amla (sour) Lavan (salty) Godugdha (Milk) Madhu (Honey) Koshnajal (Lukewarm Water) | Food regime – Vatal lagu annahar (vata vitiating Light Food), Pramitahar (inadequate quantities of food) |
| Vihar (behaviour regime) Abhyanga(massage) Utsadhana (anointing) Atapsevan (sunbath,) Yatheccha maithunsevan (sexual intercourse up to full satisfaction) | Behaviour regime – Pravat sevan (strong winds) |

Table 2: Indication and contra-indication in winter

| Indications | Contra- Indications |
|--|---|
| Food regime – same as Hemant | Food regime – Katu, (pungent)Tikta,(bitter) kashay rasa, (astringent), vatakar (vata vitiating), laghu annasevan (light), Sheetpan (cold) |
| Behaviour regime – Ushnagruha ashrayet (warm shelters) | Behaviour regime – same as Hemant |

Table 3: Indication and contra-indication in spring

| <u> </u> | |
|---|---|
| Indications | Contra- Indications |
| Food regime – Nirgal sidhu Madhvik sidhu (types of wine preparations), Yava godhum sevan (barley and wheat) | Food regime – Guru,(heavy), Amla (sour) snigdha, (unctuous) madhur anna (sweet food) |
| Behaviour regime – Vyayam (exercise) Udvartan (dry massage) Kavalgraha (gargling) Sukhambu prayog (lukewarm water), Vaman (therapeutic emesis) | Behaviour regime – Diwaswap (sleep during the daytime) |

Table 4: Indication and contra-indication in Summer

| Indications | Contra- Indications |
|--|--|
| Food regime – Swadu,(sweet) sheeta,(cold) Drava (liquid), Snigdha annapan (unctuous) Grita, dugdha,(milk) shalianna (rice) Behaviour regime – Shitgruha shayan (Cold shelters) | Food regime – Lavan,(salt) Katu, Amla(sour) rasa sevan(pungent), Madhyapan (Alcoholic beverages) Behaviour regime – Vyayam sevan (Exercise), |
| Shashank kiran sevan, (Moon-rays), Diwaswap (sleep during the daytime) | Atapsevan (sun bath) |

Table 5: Indication and contra-indication in Mansoon

| Indications | Contra- Indications |
|--|--|
| Food regime – Taptashit jala (boiling water) Behaviour regime – Udvartan (dry massage)Swacchavastra dharan (clean clothes) | Food regime – Malin ahar (unclean food) Behaviour regime – Diwaswap (sleeping during the day) Vyayam (Exersize), Atap(Sunbath) and vyavay sevan (sexual intercourse) |

Table 6: Indication and contra-indication in Autumn

| Indications | Contra- Indications |
|--|---|
| Food regime – Laghu, (light) Madhur (Sweet), Tikta, (bitter) sheeta annapan (Cold food) Shali, Godhum (barley and wheat) | Food regime – Kshar (alkaline preparations), dadhi sevan (curd) |
| Behaviour regime – Virechan (purgatives), Raktamokshan (blood-letting), Indurashmisevan (Sunray) | Behaviour regime – Diwaswap (sleeping during the day)) |

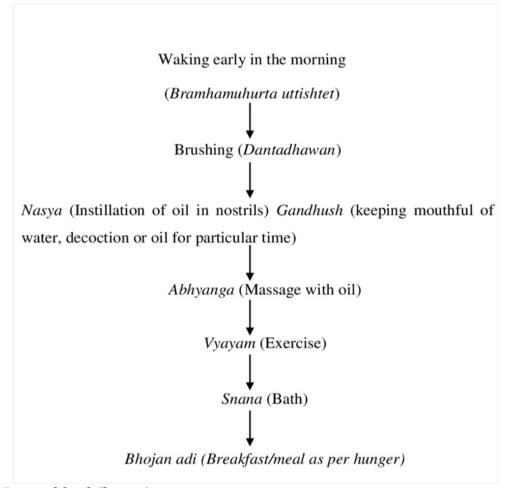


Figure 1: Protocol for daily routine

Grishma (Summer)

In Grishma, there is an accumulation of Vata in the body along with increased temperature in the environment, so the suitable food and behaviour are advised [Table 4], (Twinkle *et al.*, 2020).

Varsha (Monsoon)

In Varsha rutu, there is vitiation of Vata in the body which causes various types of diseases related to Vata. So to avoid the diseased state, several food and behavioural indication and contraindications are advised in Samhitas which are useful for prevention of diseases [Table 5], (Twinkle *et al.*, 2020).

In Sharad rutu there is Pitta vitiation so to avoid and combat with the pitta diseases, food and behavioural regime s given [Table 6], (Twinkle *et al.*, 2020).

Covid 19

Organisms

Coronavirus is spherical or pleomorphic, single-stranded, enveloped RNA and covered with clubshaped glycoprotein (Hassan *et al.*, 2020).

Mode of transmission

It is transferred from Human-to-human through fomites, physical contact, aerosol droplets, nosocomial transmission, zoonotic transmission (Hassan et al., 2020).

Clinical features

The typical systems are seen in these diseases are fever which is seen in about 98.6%, fatigue which is about 69.6 % and dry cough and diarrhoea (Wang *et al.*, 2020).

Further, these symptoms are divided into three categories as per the severity of the symptoms (Cascella *et al.*, 2020).

- 1. **Mild Disease** which includes mild fever, nasal congestion, sore throat, headache, muscle pain and malasia with upper respiratory tract viral inspection
- 2. **Moderate Disease** In this stage patient present with respiratory symptoms like cough, shortness of breath, tachypnea
- 3. Severe Disease In this patient present with severe pneumonia, acute respiratory distress syndrome, sepsis, shock with severe dyspnoea, and tachypnoea

The whole world is fighting with the deadly Coronavirus infection, Covid 19. Acharya Sushruta has defined Infectious Disease, given the routes of infection. This definition is precisely suitable for today's condition. In the present situation, everyone in every country is maintaining hygiene like washing feet and hands after coming from outside. This is only one thing. Ayurved had already depicted the methods for Daily routines and seasonal routines, which are mentioned by different Acharyas by the team Dincharya and Rutucharya in almost all Samhitas respectively. Out of which I have given the strategies which can be followed by everyone in day to day life for prevention from not only infectious diseases but also other systemic disorders.

Dincharya starts with waking up early in the morning before one and a half hour before sunrise. It causes appropriate functioning of the circadian cycle of the biological clock with the 24 hours of the Earth. If an individual doesn't wake up early in the morning, he will suffer from Unusual tiredness, Impaired performance, Anorexia, Constipation etc (Altevogt and Colten, 2006). Brushing teeth and avoids halitosis (Torwane et al., 2014). Acharyas have advised brushing your teeth twice a day. In western countries, there is a fad of bed tea/ coffee which flushes the organisms into the mouth and stomach. Nasya (Instillation of oil in nostrils) helps to avoid allergen/microbes, which invade the nasal mucous membrane and get a route to the lungs. The allergens get stuck to the oil, and the further infection can be avoided (Chaudhary et al., 2018) Gandhush or Kawalgraha (Gargling) helps to wash out the allergens or microbes which are present in the oral cavity (Torwane et al., 2014). Abhyang (massage)

helps in delaying ageing, it alleviates tiredness, and it is Vatashamak.

Along with these, it is good for the eyes; it strengthens muscles and makes skin more attractive (Kumar et al., 2015). Vyayam (Exercise) causes the body flexible and enables for various task. It increases digestive fire which in turn protects from being ill and dissolves extra fats. It makes the body attractive (Bagde et al., 2015). Snana (Bath) is Deepan (Increases digestive fire), Gives energy and power. It also alleviates Itching, Dead tissue, sweat and debris from the skin. It vanishes lethargy and burning sensation (Rao, 2020). After Snana, Breakfast or meal is advised. Avurveda considers Mandagni (diminished digestive fire) as a root cause of all types of diseases (Sorathiya et al., 2010). Snana (bath) and Vyayam (exercise) increases the fire and avoids the causative factor of being diseased.

Out of these as per present scenario in-home quarantine or in-home lockdown, wake up early in the morning for proper evacuation of faecal matter. Brushing the mouth, Gargling by medicated kwath like Trifala to prevent respiratory diseases. Exercise will help maintain the strength of the body and to maintain cardiac activity during home quarantine and home lockdown. Nasya with medicated oil also be most useful in this condition for the prevention of the respiratory diseases as it directly acts on allergic microbes present in the nasal mucosa. All of these methods will be useful during this period.

Rutucharya gives a protocol of Ahar (Food regime) and Vihar (Behavior) according to the season. Hemant Rutu falls in Visarga Kala in which the Bala (Strength of body) is good, and the jathargni is strong. This Jatharagni can digest Guru Dravya (regimes which are hard to understand). So, in Hemant Rutu it is advised to take Guru Anna (Heavy), Amla, (sour) Lavan (Salt) Rasa and Godugdha. Koshnajal (Lukewarm water) is proposed in this Rutu as it avoids Kapha Sanchiti (Kapha accumulation). Abhyanga(Oil massage). Utsadhan (Massaging body with medicinal Powder), Atapsevan (taking sunbath or sitting in a first bonfire). In don'ts, vatal, laghu (Light) Annahar are included as the Jatharagni is strong (Junjarwad, 2018). The Shishir Rutucharya is same as Hemant Rutucharya as the coldness in the environment is identical in both Rutus. (Season)The Katu (pungent), Tikta (bitter), Kashay(Astringent) Rasa is not advised in Shishir Rutu as it causes Vata Prakop (Vata raging). Sheetannapan (Cold food and drinks) is avoided for the same reason (Twinkle et al., 2020). In Vasant Rutu, there is Kapha Prakop, so Madhu, (honey) Yava, Godhum, (barley and wheat)

Vyayam, (Exercise) Udvartan, (dry massage) Kawalgraha,(Gargling) Sukhambu pan (lukewarm water) is advised. Guru, (heavy) Snigdha, (unctuous) Madhur anna (sweet) and Diwaswap (sleeping during the day) is not recommended as it causes vitiation of Kapha Dosha (Sarkar et al., 2011). In Grishma Rutu, there is an increase in temperature, which causes absorption of body fluids and water from the environment. So the food gives energy and lowers thirst and satiety are advised to compensate for the high temperature. Diwaswap (sleeping during the day) is recommended as there is Vata Prakop (Vata vitiation food) in Grishma rutu. Lavan,(salty) Katu, (pungent) Amlaras (sour) Sevan and Madhyapan (Alcoholic beverages) are not recommended as it increases acid in the body. Vyayam (exercise) and Atap Sevan (sunbath) should be avoided as it causes sweating and in turn, loss of water (Sarkar et al., 2011). In Varsha rutu, Taptashita Jala (Boiled water) should be drunk as it contains, many dissolved impurities in it. Addition to this, boiled water is neutral. Swacchavastradharan (Wearing clean cloths) gives safety from microbes which live in mud. Malin ahar (Contaminated food) should be avoided as it may contain various germs which may stand fatal for health (Twinkle et al., 2020). In Sharad rutu, there is Pitta prakop (Pitta vitiation). So Madhur, (sweet) Tikta, (bitter) sheeta annapan (cold food) is advised which is counter for Pitta. Virechan (purgatives) and Raktamokshan (bloodletting) is recommended for Purgation of Pitta from the body. Kshara (alkaline preparations) and Dadhi (curd) should be avoided as they are ushna in Guna and Dadhi are Abhicchyandi which causes srotorodh in tiny channels in the body. (Twinkle et al., 2020) Out of these, Vasant rutuchrya (Spring) can be followed in these diseases as this season fits in Vasant rutu.

Aadankala (period of emission) consists of Shishir, Vasant and Grishma rutu. In this period, The dryness and hotness are get increased due to the properties of Vata Dosha. The lethargy increases in this season. Visargakala (period of emission) consists of Varsha, Sharad and Hemant (Deshpande and Deshpande, 2018). In this Kala, The Rukshata of Vayu decreases and the body is strengthened in this Rutu. The recommended Ahara, Vihara is according to the seasonal changes and its effect on bodily constitution.

CONCLUSIONS

Coronavirus is highly infectious Disease. Along with Coviod 19, we have other systemic disorders. We can avoid this infection by merely following the Din-

charya and Rutucharya. In-text Acharya has given many norms to follow in Dincharya and Rutucharya. But in this, busy era no one gets time to follow all of them. So, here I have structured the Dincharya and Rutucharva in the pure form so that every individual can pursue health. Dincharya includes early waking up, brushing, Instillation of oil in the nostril, keeping mouthful of water, decoction or oil for a particular time, massage with oil, Exercise, Bath and Meal or breakfast. These are the simple thing an individual has to follow. In Rutucharya, Vasant rutucharya can be developed as present time belongs to Vasant rutu. Which includes Vyayam (exercise), Udvartan (dry massage) Kavalgraha (gargling), Sukhambu prayog (lukewarm water), Vaman (therapeutic emesis).

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Conflict of Interest

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REFERENCES

Altevogt, B. M., Colten, H. R. 2006. *Sleep disorders and sleep deprivation: an unmet public health problem.*National Academies Press.

Asthana, A. K., Monika, M. A., Sahu, R. 2018. Significance of Doshas in Management of various Disease. *Asian Journal of Pharmaceutical Research and Development*, 6(5):41–45.

Bagde, A. B., Sawant, R. S., Sawai, R. V., Dhimdhime, S. R., Swami, N. B. 2015. Preventive Aspect of Vyayama (Physical Exercise). *International Jour*nal of Ayurveda and Alternative Medicine, (1):3–3.

Basisht, G. 2014. Exploring insights towards definition and laws of health in Ayurveda: Global health perspective. *AYU* (An International Quarterly Journal of Research in Ayurveda), 35(4):351–351.

Cascella, M., Rajnik, M., Cuomo, A., Dulebohn, S. C., Napoli, R. D. 2020. Features, evaluation and treatment coronavirus (COVID-19). *StatPearls Publish*ing.

Chaudhary, D. M., Chaudhary, M. M., Chaudhary, F. K. 2018. Evaluation of Newer Insecticidal Formulation against Sucking Pests and Effect on Yield

- of Soybean (Glycine max L.). *International Journal of Current Microbiology and Applied Sciences*, 7:3834–3840.
- Deshpande, A., Deshpande, M. 2018. Exploration of Basic Concepts of the Ayurvedic Dietetic. *International Journal of Medical Science and Innovative Research*, 3(5):178–185.
- Hassan, S. A., Sheikh, F. N., Jamal, S., Ezeh, J. K., Akhtar, A. 2020. Coronavirus (COVID-19): A Review of Clinical Features, Diagnosis, and Treatment. *Cureus*, (3):12–12.
- health organisation, W. 2020a. Covid 19 pandemic.
- health organisation, W. 2020b. Modes of transmission of virus causing Covid 19.
- Junjarwad, G. J. 2018. Hemant Rutucharya-A Seasonal Regimen. *Journal of Ayurveda and Integrated Medical Sciences*, 2(6):110–112.
- Kumar, V., Rajeev, S., Awadhesh, P., Meenakshi, P., Bharteeya, P. 2015. A Review On Phenomenal Effect Of Selective Karmas In Daily Regimen For Prevention Of Different Communicable Diseases. Corpus ID: 74175078.
- Naiker, A., Rao, G. 2017. Ayurveda and Communicable Diseases. *Journal of Ayurveda and Integrated Medical Sciences*, 2(5):85–88.
- Patwardhan, B. 2014. Bridging Ayurveda with evidence-based scientific approaches in medicine. *EPMA Journal*, 5(1).
- Rao, B. R. 2020. Bath In Ayurveda, Yoga And Dharmasasfra.
- Sarkar, P., Thakkar, J., Chaudhari, S. 2011. Ritucharya: Answer to the lifestyle disorders. *AYU* (An International Quarterly Journal of Research in Ayurveda), 32(4):466–466.
- Sorathiya, A. P., Vyas, S. N., Bhat, P. S. N. 2010. *A clinical study on the role of ama in relation to Grahani Roga and its management by Kalingadi Ghanavati and Tryushnadi Ghrita*, volume 31.
- Torwane, N., Hongal, S., Goel, P., Chandrashekar, B. R. 2014. Role of Ayurveda in management of oral health. *Pharmacognosy Reviews*, 8(15):16–16.
- Twinkle, G., Nitin, M., Sukhdev, K. 2020. Ritucharya Diet And Life Style.
- Wang, Y., Wang, Y., Chen, Y., Qin, Q. 2020. Unique epidemiological and clinical features of the emerging 2019 novel coronavirus pneumonia (COVID-19) implicate special control measures. *Journal of medical virology*, 92(6):568–576.