

Role of Ayurveda in Healthcare Management amidst COVID-19 pandemic: A systematic study of literature

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ABSTRACT

COVID-19 has been by far the single most disruptive event in the recent past which has caused immense suffering and loss of human lives at a global scale. The pandemic has spread to the remotest places on earth including Antarctica. Ayurveda, the ancient science of healing which focusses on prevention and maintenance of good health by having the right thinking, balanced diet and an understanding of balance between body and mind may offer a solution to the already overwhelmed healthcare system in most countries. Although vaccination has slowed down the spread of virus but the long-term efficacy of vaccines is yet to be verified. As per the WHO, epidemics are becoming more common nowadays and therefore one's own immunity and the country's healthcare systems are the major defences before vaccines come into play. This paper reviews the literature regarding holistic approach of Ayurveda towards tackling the pandemic both at the individual and community level.

Keywords

Ayurveda, COVID-19, Healthcare

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Introduction

The novel coronavirus has overburdened the healthcare system of most countries. During the early stages of the pandemic, governments were worried regarding the ability of hospitals to deal with huge number of COVID-19 positive patients. But as the virus continued to wreak havoc in the subsequent period, other issues associated with healthcare management continued to emerge. As per the WHO, 90 percent of the countries faced severe disruption of essential emergency healthcare services. Many of the essential diagnostic and treatment services for diseases like cancer or other non-communicable diseases were severely impacted. Routine immunization programs, treatment of mental diseases have all taken a hit because of the pandemic. Blood transfusion and other emergency services were also hit. Lockdowns and fear of contracting of virus also added to the low supply and demand in the healthcare sector.

Ayurvedic treatment can reduce the intensity of illness (Girija & Sivan, 2020) and thus buy precious time for doctors and hospitals. The earlier cited case report suggests the details of a case in which the timely intervention of ayurvedic drugs prevented the patient from becoming critically ill. Treatment of patients in case of an epidemic is well-documented in various ayurvedic texts specifically being addressed as *Janapadodhwamsa Vyadhi*. Ayurveda may not

provide the cure but may actually help reduce the number of patients being admitted in hospitals on account of being critical ill thus sparing time and resources for the healthcare sector to cope up with the rising number of patients.

It is also beneficial for patients with co-morbidities who could develop adverse reactions to allopathic treatment. Ayurveda has its genesis in India and is popular amongst Indians in dealing with lifestyle related disorders besides being a widely acclaimed wellness product. Ayurveda has always been used traditionally as a medicine for prevention and control of various disorders associated bad life style and old age. As per Ayurveda, one's immunity can be improved by following a strict wholesome diet and adopting specific lifestyle modifications which includes following a fixed daily routine and performing yogic exercises. Ayurveda also recommends consumption of various Rasayana prepared from herbal ingredients with proven immunomodulatory impact (Rajput, 2020). (Tillu et al., 2020) highlights the possible prophylactic and therapeutic potential of various ayurvedic medicines in the treatment of COVID-19.

Methodology of Study

During the course of the study, research papers, case reports, editorials and review papers were systematically studied after identifying the relevant articles from Scopus database which linked Ayurveda to healthcare management during

the pandemic outbreak. Articles and reports from WHO and Ayush have also been studied to identify ongoing developments and recent breakthroughs in the field of ayurvedic medicines. This helped in identification of the major areas of study associated with this area of research.

Potential drugs of natural origin

(Sharma et al., 2020) highlights the fact that many of the herbal and ayurvedic medicines used to treat respiratory illnesses could be possible candidates for further research for COVID-19 remedies and treatment. (Rajput, 2020) mentions 27 herbal plant that have proven immunomodulatory activity. It also cites the importance of ayurvedic practices important for restricting the spread of the disease. (Kumar Verma et al., 2021) also states the importance of Gingerol, Curcumin and Quercetin possessing anti SARs COV-2 activity. Gujarat and Kerala (states of India) have already taken initiatives to treat asymptomatic patients (Golechha, 2020) using ayurvedic medicines and methodologies. (Rastogi, Pandey, et al., 2020) recommends ayurvedic treatment for patients based on the intensity of illness. Keeping in mind that a majority of patients experience mild symptoms of the disease, ayurvedic intervention definitely reduces the number of critically ill patients requiring hospitalization.

Role of Diet

As per the WHO, a balanced diet along with intake of adequate amounts of water is essential for developing immunity in general. It suggests intake of fresh and natural food which includes fruits and vegetables grains and starchy food like roots of potato and yam. Overcooking of food is not advised. Limiting the intake of sugar and salt along beverages like soft drinks with high sugar content is advised.

(Lohi & Sawarkar, 2020) explains the importance of food in the context of Ayurveda. Apart from the specifics regarding the type of food to be consumed as per season and time of the day, it also stresses on healthy eating and cooking habits. For example, it states that there should be a gap of approximately 12-16 hours between dinner and breakfast for maintain a healthy meal routine. Similarly, it states that sleep, exercise and

consumption of wholesome and easily digestible food are vital for developing good immunity.

Another important aspect of Ayurveda relevant to the boosting immunity is *Rasayana Chikitsa*. As per Ayurveda *Rasa dhatu* is responsible for the youthfulness, mental and physical strength in a human body. (Gurmule, 2020) has aptly described the importance of Chyavanprash in building immunity. It also touches upon the herbal ingredients involved in the making of Chyavanprash which have known medicinal effects. Many ayurvedic companies like Dabur have already seen huge spikes in the demand for Chyavanprash and other dietary supplements during this period of the pandemic.

Recommendations of Ayush

Ayush has recommended regular practice of yogasanas and pranayama-along with proper adherence to *Dinacharya* i.e., timely disposition of daily chores for developing healthy body and mind, to deal with the onslaught of COVID-19. During the pandemic it has recommended the intake of warm water and addition of spices like Turmeric, Cumin, Coriander and Garlic in the cooked food. It also advocates the consumption of Chyavanprash and herbal tea containing Basil, Cinnamon and black pepper. Additionally, it suggests adoption of simple ayurvedic procedures which includes application of oil on the nostrils and oil pulling therapy. Steam inhalation with fresh *Pudina* (Mint) or *Ajwain* (caraway seeds) is also suggested.

Telemedicine as a viable alternative

Technology could be one of the most impactful factors when it comes to providing safe, affordable and timely diagnostics of many diseases. Telemedicine offers an effective solution for patients unable to visit hospitals or clinics in person. The telemedicine market in India is growing at a healthy rate and the benefits are not restricted only to the patients. All of the patients datapoints are stored for future reference and breaks the barrier of accessibility. Ayurvedic drugs are becoming more evidence based standardized products and Telemedicine has the opportunity to reduce the incidence of quackery by increasing transparency and ensuring higher levels checks while onboarding practitioners. In the wake of COVID-19 government has laid down

strict guidelines (Central Council of Indian Medicine, 2020) for Ayurvedic, Siddha and Unani practitioners. The motivation behind these rules is to prepare ASU specialists for the adoption of telemedicine tools for their treatment. This is a forward-thinking decision by the Indian Government and will definitely benefit both the doctors and patients. These guidelines speak explicitly about the nature of relationship of the doctor with the patient. Another advantage of the telemedicine is that it is specifically useful in preventing the spread of communicable diseases by avoiding physical contact. Thus hospital, clinics and other healthcare systems which have invested in these technologies are better equipped to deal with such scenarios.

During the lockdown many people suffering from other illness such as hypertension, diabetes, mental and neurological disorders had to suffer due to lack of access to their medical practitioners. In these tumultuous times, Gathiya Clinic at State Ayurvedic College and Hospital, Lucknow successfully conducted its first telemedicine consultation project in the mid-April of 2020. (Rastogi, Singh, et al., 2020) highlights how with the basic understanding of WhatsApp video call, the clinic was able to serve 5-8 patients in one sitting. By dividing the activities of record keeping, coordinating the calls and consultation amongst staff members, they were able to smoothly carry out the virtual consultation. This project conducted for an ayurvedic clinic stands testimony on how the application of technology has the potential to improve the way in which traditional diagnosis and treatment is done. Given the low internet tariff rates and decent market penetration of the smart phone technology in India, the scope of telemedicine will definitely widen and with it the legalities of a virtual medical consultation.

Conclusion

This paper aims to highlight the hidden potential of traditional and alternate medicines during events such as COVID-19 pandemic. Ayurveda as a form of healthcare practice is known in most Indian household Indian household and has been used extensively for treating a host of diseases right indigestion and dyspepsia to diabetes mellitus and Parkinson's disease.

Emerging companies and start-ups in the herbal/traditional market segment have not only invested in the production of innovative and effective herbal products but also assist in holistic treatment of lifestyle related disorders which includes making changes and adjustments in one's lifestyle.

Understanding how traditional medicines could be integrated into the mainstream healthcare could hold a key to a promising future especially in the wake of a global pandemic. It is a well acknowledged fact that a body's immunity cannot be developed or improved in a day or two. However, keeping in mind, the increasing frequency of the pandemics, Ayurveda could provide long term solutions if due attention towards research is invested in it.

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