



## International Journal of Ayurveda and Traditional Medicine

### The Impact of COVID-19 Pandemic on Ayurveda Education- Challenges and Solutions.

Vidhya Bharti Sharma,<sup>1</sup> Bharatkumar Padhar,<sup>2</sup> H.M.L. Meena.<sup>3</sup>

<sup>1</sup> Department of Kayachikitsa, National Institute of Ayurveda, Jaipur, India.

#### ABSTRACT

**Background:** The World Health Organization (WHO) has declared Coronavirus disease-19 (COVID-19), as the pandemic disease. Social distancing and face-covering have been adopted to prevent the spread of the disease. The COVID-19 pandemic has significantly disrupted every aspect of human life, including education too. **Aim:** This study aims to identify the impact of the COVID-19 pandemic on Ayurveda education and provide a possible solution for rising problems. **Methodology:** The impact of the COVID 19 pandemic on the Ayurveda education system was assessed by keen observations and discussion with students and teachers of Ayurveda. With the help of information technology experts, the available technology tools were also critically analyzed and reviewed to engage them for the solution of the issues concerned with Ayurveda education.

**Outcomes:** The COVID 19 pandemic has disrupted the patient-centric teaching-learning process in Indoor, Outdoor, and emergency wards. Clinical examinations, the practice of *Panchakarma* procedures, and evaluation of patient conditions based on Ayurveda parameters like *Nadi Pariksha* (Pulse examination), *Sparsha Pariksha* (Palpation and Percussion) are highly affected in COVID 19 pandemic era. The use of online meeting tools, Google classroom, virtual case presentations, webinar organizing tools, and online examination conducting tools is the greatest help to fight the issues related to Ayurveda education.

**Conclusion:** Identification of issues and adoptions of suitable technology, effective handling, and creating the interest of students in technology can help to minimize the negative impact of the COVID 19 pandemic on Ayurveda education.

**Keywords:** Ayurveda, COVID-19, CoronaVirus, Education, Teaching Learning.

#### INTRODUCTION

A few cases of pneumonia of unknown etiology were identified in Wuhan City, Hubei province in China, on 31st December 2019.<sup>1</sup> Most of the patients were having symptoms of dry cough, dyspnea, fever, and bilateral lung infiltrates on imaging. These cases were also linked to Wuhan's Huanan Seafood Wholesale Market, which trades in fish and a variety of live animal species including poultry, bats, marmots, and snakes. The causative agent was identified from throat swab samples conducted by the Chinese Centre for Disease Control and Prevention (CCDC) on 7th January 2020 and was subsequently named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The World Health Organization (WHO) named the disease COVID-19.<sup>2</sup>

The World Health Organization declared COVID-19 as a pandemic on 11 March 2020.<sup>3</sup> Worldwide it has exploded to 105 million cases and caused 2.3 million deaths by 5<sup>th</sup> February 2021.<sup>4</sup> In India, the first case was reported on 30 January 2020. By 5th February 2021, India had reported 10.8 million cases and 1.5 lacs deaths.<sup>5</sup>

**Correspondence:** Dr. Vidhya Bharti Sharma, Post Graduate, Department of Kayachikitsa, National Institute of Ayurveda, Jaipur, India. Email: vidyabs21@gmail.com. Phone No. +91-9462557647.

Currently, there are few studies that define the pathophysiological characteristics of COVID-19, and there is enormous uncertainty regarding its mode of transmission. Current knowledge is largely derived from similar coronaviruses, which are transmitted from human-to-human through respiratory fomites.<sup>6</sup> Typically, respiratory viruses are most contagious when a patient is symptomatic. However, there is an increasing body of evidence to suggest that human-to-human transmission may be occurring during the asymptomatic incubation period of COVID-19, which has been estimated to be between 2 and 10 days.<sup>7</sup>

The pandemic has significantly affected all the sectors including the education sector worldwide, which affects the socio-economic conditions of the people. This study has been planned to analyze the impact of COVID-19 on Ayurveda education in India. It has also been discussed about some immediate measures to overcome the situation that occurred in the sector. The country is under limited socio-economic activities and movements of the people to protect the human being from the community spread of the coronavirus. All the sectors including educational institutions closed for more than 4 months and there is uncertainty about the reopening of educational institutes. Since March 2020, Ayurveda education in India has experienced a major disruptive change because of the COVID-19 pandemic and nationwide lockdown. However, for faculty and students of Ayurveda, the novel coronavirus (COVID-19) has transformed a murky study tool picture into something that is a turning point in many careers.

### Impact of COVID 19 on Ayurveda education:

The emergence and high incidence of COVID-19 created major issues in the Ayurveda education system. During this critical time, maximum efforts are being done to control the COVID-19 pandemic. The measures adopted to reduce the spread have disrupted Ayurveda professions' education. If social distancing and other measures of controlling the COVID 19 are not followed, Students can be at higher risk to acquire the virus during training and can potentially spread the virus even when asymptomatic. Therefore, Ayurveda educational institutions were shut down both for the safety of students and communities. The social distancing measures obstruct students and teachers from gathering in learning labs, lecture halls, or small-group rooms.<sup>8</sup> Measures adopted to ensure social distancing have led to the shutdown of Ayurveda colleges

and have compelled the situation of working from home for both Ayurved teachers and students. Almost all students of Ayurved colleges are relocated to their homes, leaving their hostels just before the beginning of lockdown, of local, interstate, and international travel. Thus, leaving behind routine educational lecture classes, practicals, tutorials, seminars, ward, the outpatient department [OPD], and OT postings and internal assessment examinations. On the other side, the physical attendance of Ayurveda teachers/clinicians at workshops, CMEs, symposia, and conferences, has ended.

In short, the COVID 19 pandemic had a huge influence on various aspect of Ayurveda education like; Classroom teaching-learning, Hospital side practical training like indoor, outdoor patients' examination and bedside discussion, Laboratory work, Internal assessment of students, Final examination, CME, Group discussion, and seminars, and Ongoing research training.

Due to the closure of Ayurveda institutions or colleges, both laboratory learning in labs and clinical learning at hospitals are highly affected. Clinical postings as internees trainees have been canceled or deferred. The assessment and academic progress are also delayed.<sup>9</sup> Ayurveda students have missed the chance to learn about the practical response of the Ayurveda system of medicines in this pandemic.

Ayurveda students have also made to feel being sidelined to fight against COVID 19 due to no allowance for the Ayurveda system for treatment of COVID 19.<sup>10</sup> The COVID-19 pandemic situation has been growing quickly at local and global level, therefore Ayurveda medical colleges, with their clinical partners' knowledge and input, should attentively assess their local situation persistently to make determinations about their students' participation in direct patient contact activities.<sup>11</sup> The great challenge for Ayurveda teachers in the present times is to reproduce their clinical experiences. These exposures vary from outdoor and indoor ward postings, where they can have interactive communication with patients and teachers during clinical examinations, case presentation sessions, thus helping in the enhancement of communication and clinical skills. To cope up with this challenge, Ayurveda teachers can use animated videos, podcasting, virtual reality techniques, and simulation training programs for teaching purposes to facilitate the learning of the students.

Use of online platforms like websites, blogs, youtube, Facebook, etc social media and online meeting tools like Google meet, Zoom, Microsoft team, etc can be helpful to host the clinical skills demonstrating videos and procedural clinical videos for effective communications with students.<sup>12</sup>

Another way in which COVID-19 has affected medical education is the canceling of medical conferences. Various conferences, seminars are helpful for Ayurveda students to acquire extraordinary medical knowledge like recent advances in the field, presentation skill development, interaction with experts of subjects. These conferences or seminars were canceled in COVID 19 pandemic era due to guidelines of the government for maintenance of social distancing to reduce the spread of disease. Ayurveda students and teachers are facing the great problem of this pandemic event, being not upgraded with the knowledge of recent updates in the field with its practical training. The students are also lacking the practical exposure of presentation skills and case presentation and thus discussion of their subject related problems with the experts. Due to the cancellation of seminars or workshops or CMEs, students have to face some academic issues for not attending some mandatory such programs in prescribed time durations. Educational events like teachers' training programs and workshops for teachers have also declined in the COVID-19 pandemic era which ultimately resulted in less up-gradation of knowledge and skills of teachers and thus students too. The issue somehow can be solved by using technology by both Ayurveda teachers and students to minimize the adverse impact on the teaching-learning process.<sup>13</sup> Online webinar organizing tools are available in the market, which can help one to organize and manage webinars effectively. The individual can present videos, PowerPoint presentations, and audios with the targeted audience in an effective manner. There are also scopes of discussion between subject experts and the audience during an online webinar. The facilities of live streaming webinar content on various social media can help the students to learn from their comfort zone and time. Students can also present their views and present their ideas with peers of the field with the help of such technology tools to enhance the presentation skills.<sup>14</sup> Therefore, we must consider how Ayurveda students can develop and demonstrate skills such as knowledge, determination, and collaboration, and best preparations for the careers ahead of them in the face of these recent changes. The younger generations in Ayurveda colleges are perhaps best equipped to integrate technology and webinars into health care delivery and sharing their knowledge in innovative online settings. Due

to the COVID-19 pandemic and the necessity to limit exposure of healthcare workers, some interneers or postgraduate scholars have been kept on reserve. Due to that, these trainees are at home and only come to the hospital in the situation of their need. The period of interneers or postgraduate training is a short time to master the skills that are needed for independent practice or professional expertise. Reserving the Ayurveda interneers postgraduates for hospital services may reduce their exposure to COVID, but it may reduce the learning opportunities for trainees to become competent in their respective fields.

Continuous internal evaluation and final examinations are also important to assess the learning level of students. It helps students and teachers both to assess whether their learning and teaching process is in the inappropriate direction or not. The poor performance of students in internal exams can help the students to identify their weak areas of learning and can help to enhance their performance, acquired skills with help of their teachers, seniors, or colleagues. University examinations are conducted to promote the students in the next professional year or awarding the degree through the assessment of the knowledge and skills of Ayurveda students required for so. Due to COVID 19 pandemic, the internal and university examination mechanism is also affected, which may have its impact on poor performing students who will not be able to assess their learning level and so their poor performance can harm their professional competency.

Online technology tools, which are available with the facility of setting question papers, conduction of online examination, and evaluation of students, can help both the students and teachers to get rid of the problems of evaluation-related issues. Virtual case presentations and video conferencing with audio-visual facilities can help to conduct the practical examination to assess the practical skills of Ayurveda students.

## CONCLUSIONS

COVID 19 pandemic has influenced every sector of society along with the education sector too. The Ayurveda education system has been affected in several ways. The classroom teaching, practical training in the hospital, knowledge upgrading through seminars, workshops, and CMEs, group discussions, laboratory works, and regular assessment of students and examinations process, etc are heavily affected by the COVID 19 pandemic. The use of

suitable technologies like online meeting tools, webinars conducting tools, Google classroom, and examinations conducting tools with the interest of making ourselves familiar with them can help to resolve the issues that arose due to COVID 19 pandemic. The use of technology in teaching and learning may also help to bring advances in traditional teaching-learning methodology in the future.

## REFERENCES

1. H. Lu, C.W. Stratton, Y. Tang, Outbreak of pneumonia of unknown etiology in Wuhan China: the mystery and the miracle, *J. Med. Virol.* (2020) 25678.
2. World Health Organization, WHO Director-General's Remarks at the Media Briefing on 2019-nCoV on 11 February 2020, (2020) <https://www.who.int/dg/speeches/detail/who-director-general-s-remarks-at-the-media-briefing-on-2019-ncov-on-11-february-2020>.
3. Coronavirus Disease (COVID-19) - Events as they happen. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen> [Last accessed August 19, 2020].
4. Coronavirus Update (live): Deaths from COVID-19 Virus Outbreak - Worldometer. Available at: <https://www.worldometers.info/coronavirus/> [Last accessed February 6, 2021].
5. Home j Ministry of Health and Family Welfare j GOI. Available at: <https://www.mohfw.gov.in/> [Last accessed February 6, 2021].
6. Centers for Disease Control and Prevention, 2019 Novel Coronavirus, (2020) <https://www.cdc.gov/coronavirus/2019-ncov/about/transmission.html>.
7. Q. Li, X. Guan, P. Wu, et al., Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia, *N. Engl. J. Med.* (2020) NEJMoa2001316. Epub ahead of print.
8. Del Rio C, Malani PN. 2019 Novel coronavirus-important information for clinicians. *JAMA* online February 5, 2020. doi:10.1001/jama.2020.1490.
9. Ahmed H, Allaf M, Elghazaly H. COVID19, and medical Education. *Lancet Infect Dis* online 23, 2020. [https://doi.org/10.1016/S1473-3099\(20\)30226-7](https://doi.org/10.1016/S1473-3099(20)30226-7).
10. Medical students feel sidelined in the fight against COVID-19: We want to help. Available at: <https://crosscut.com/2020/03/medical-students-feel-sidelined-fight-against-covid-19-we-want-help>. Accessed on- May 15, 2020.
11. Menon A, Klein E J, Kollars K, Kleinhenz ALW. Medical Students Are Not Essential Workers: Examining Institutional Responsibility During the COVID-19 Pandemic. *Academic Medicine. A Head of Print.* 10.1097/ACM.0000000000003478
12. Dong C, Goh PS. Twelve tips for the effective use of videos in medical education. *Med Teach* 2015; 37:140-5
13. Hartman ND, Lefebvre CW, Manthey DE: A narrative review of the evidence supporting factors used by residency program directors to select applicants for interviews. *J Grad Med Educ.* 2019, 11:268-273. Accessed: March 16, 2020: <https://www.jgme.org/doi/10.4300/JGMED-18-00979.3>. 10.4300/JGME-D-18-00979.3
14. Reshef O, Aharonovich I, Armani AM, Gigan S, Grange R, Kats MA, Sapienza R: How to organize an online conference. *Nat Rev Mater.* 2020, Accessed: March 29, 2020: <https://www.nature.com/articles/s41578-020-0194-0>. 10.1038/s41578-020-0194-0

Source of Support: Nil  
Conflict Of Interest: None Declared

This work is licensed under a Creative Commons Attribution 4.0 International License. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in the credit line; if the material is not included under the Creative Commons license, users will need to obtain permission from the license holder to reproduce the material. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>