

# Hybrid Conferences in the Post-COVID-19 Era: Time Yet for a Paradigm Shift for Medical Associations

Dinesh Kumar Devaraj, Shyamanta Barua<sup>1</sup>, Neeta karal Nair, Raghunatha R. Reddy<sup>2</sup>, Namitha Chathra<sup>3</sup>, Aruna Devi<sup>4</sup>, Dipak Kumar Agarwal<sup>5</sup>, Savitha Somaiah<sup>2</sup>, Jagadish P<sup>6</sup>

Dr Dinesh's Skin & Hair Clinic, Chennai, Tamil Nadu, <sup>1</sup>Department of Dermatology, Assam Medical College & Hospital, Dibrugarh, Assam, <sup>2</sup>Roots Skin Institute of Dermatological Sciences, Bengaluru, Karnataka, <sup>3</sup>Department of Dermatology, P.E.S. Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh, <sup>4</sup>Essence Skin Clinic, Guwahati, Assam, <sup>5</sup>Department of Dermatology & Venereology, Gauhati Medical College & Hospital, Guwahati, Assam, <sup>6</sup>Cuticare Centre, Bengaluru, Karnataka, India

## Abstract

Since the first COVID-19 lockdown in India was declared, all scientific conferences and related activities have been conducted in online formats (1). The ACS(I) [Association of Cutaneous Surgeons (India)] conducted its Annual National Conference called ACSICON-2021 for over 1150 delegates in mid-2021 in a hybrid mode. ACS(I) was one of the first organizations to embrace the hybrid conferencing strategy in the post-COVID-19 era in India. However, while meeting feedback and testimonials are typically gathered, there is very little public data documenting conference attendees' viewpoints. The goal of this research study was to look at the viewpoints of medical conference attendees (such as physicians and medical professionals) on hybrid conferencing as a future trend, the danger of infectivity and transmissibility of COVID-19 during and after the event, the effectiveness of stringent safety protocols and vaccination in preventing the disease and thereby assess the feasibility of hybrid conference as the most convenient mode of learning interaction in the current COVID-19 era and also Post COVID-19 era.

**Materials and Methods:** The physical attendees were surveyed post-ACSICON 2021 conference online, using a mixed-methods technique. Attendees were given a 16-point questionnaire using Google Forms that covered subjects including the COVID-19 preventive procedure, immunization status, infection rates during and after the conference, and overall satisfaction with the hybrid conference. A total of 231 people were sent the survey questionnaire. **Results:** Only 0.4% ( $n = 1$ ) of the participants reported being infected by COVID-19 virus after the conference. 86% ( $n = 198$ ) of the respondents also felt that all the necessary precautions were taken during the ACSICON 2021 conference. Most of the respondents (82%,  $n = 189$ ) rated the hybrid conference interaction to be more satisfying than an online conference. An overwhelming majority of the respondents (92%,  $n = 209$ ) found hybrid conferences to be a safer option than regular conference. **Conclusion:** The COVID-19 pandemic's scope has forced a paradigm change in medical practice and research (1). ACSICON 2021 is an example of how, with careful organization, strict implementation of meticulous preventive procedures, and strict adherence to the COVID-19 protocol, medical conferences may be held without danger of infection and its transmission. Given the pace with which vaccinations are being administered, a new reality in which technology and live networking intersect via hybrid conferences will result in a more engaging and adaptable medical conference experience. In the long run, this can bring about a significant shift in the conduct of scientific meetings to best suit delegates' needs and conveniences.

**Keywords:** Cryosurgery/adverse effects, cryosurgery/methods, cryotherapy/methods, repositionable notepad, sticky note

## INTRODUCTION

In addition to burdening health care systems and hospitals, the COVID-19 pandemic has caused a severe gap in terms of skill development, capacity building, and training of doctors and medical professionals around the world.<sup>[1]</sup> Because of the countrywide lockdown from the middle of 2020 to the middle of 2021, and the subsequent rigorous regulations

imposed by the central and state governments, all scientific and medical conferences were only held virtually.<sup>[2]</sup>

**Address for correspondence:** Dr. Namitha Chathra, Department of Dermatology, P.E.S. Institute of Medical Sciences and Research, Kuppam, Andhra Pradesh, India. E-mail: namithachathra86@gmail.com

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**For reprints contact:** reprints@medknow.com

**How to cite this article:** Devaraj DK, Barua S, Nair NK, Reddy RR, Chathra N, Devi A, *et al.* Hybrid conferences in the post-COVID-19 era: Time yet for a paradigm shift for medical associations. *J Cutan Aesthet Surg* 2022;15:82-5.

### Access this article online

Quick Response Code:



Website:  
www.jcasonline.com

DOI:  
10.4103/JCAS.JCAS\_207\_21

The need for further training through conferences was felt even more so during the pandemic as the number of elective surgical procedures saw a significant drop, which meant less learning opportunities for trainees.<sup>[3]</sup> This need for learning and the inability to have a large-scale conference prompted doctors to conduct conferences in a hybrid format.<sup>[4]</sup> This strategy entails a hybrid approach in which a specified number of delegates attend both live and online sessions during the conference (in a tightly regulated and controlled environment with all COVID-19 safety protocols in place).<sup>[5,6]</sup> With the launch of the COVID-19 vaccine in India and the accompanying large-scale vaccination of doctors and medical workers, a new model (hybrid) of medical conferences is becoming more popular. Hybrid Conference also gives a flexibility to delegates and faculties to participate in physical or virtual mode in any given conference in accordance with their convenience and safety and this led ACS(I) to go for a hybrid mode of conference.

Between September 3, 2021 and September 5, 2021, the Association of Cutaneous Surgeons (India) conducted a 3-day hybrid workshop and conference named ACSICON-2021 in Guwahati, Assam. The ACSICON 2021 conference was one of the first National conferences conducted by any Dermatology Association in India to adopt the hybrid conferencing format.

First day of the conference was devoted to workshops on Dermatotomy, LASERS, and Aesthetic Dermatology. The workshops included both recorded videos of procedures and live telecast of the procedure from the faculty's place through video conferencing. The faculty were present throughout their session either physically or virtually to clarify any questions asked by the delegates, both physical and virtual. The following 2 days of conference included a presentation and panel discussions of the aforementioned topics by eminent Dermatologists. The lectures were delivered live through teleconferencing technology, some lectures were pre-recorded and telecast and there were even physical lectures. Oration and the post-graduate Quiz were in the form of pre-recorded transmission. The faculty were present live during their session even if it was a pre-recorded lecture to allow for two-way communication between delegates and the faculty. This allowed for step-by-step education, real-time clarification of doubts, and in-depth grasp of topic intricacies. The conference drew 1150 attendees. Out of this, 155 delegates were physically present at the venue and 995 delegates attended as virtually.

In the physical venue, seating arrangements were made such that there was 6 feet distance between two seats and wearing masks was made mandatory for all delegates, audio-visual personnel and venue staff in the conference halls. N95 masks were given all delegates, audio-visual personnel, and venue staff for all the 3 days. At the dining

area, each and every hotel staff was wearing a mask, adequate distancing was maintained between tables, and the food counters were arranged farthest from the tables. Dispensing sanitizers were kept at strategic places and all delegates were enquired about any rise in temperature and any other symptoms.

The participants' and delegates' perspectives on their personal safety and desire to participate in a hybrid model for future medical conferences are collected in this study. It also seeks to initiate a discussion among the medical community and dermatological societies about the safety, practicality, and usefulness of hybrid conferences as a means of medical education.

## Aim

The aim of this study was to understand the efficacy of COVID-19 prevention protocols and its impact on the hybrid conference conducted by the Association of Cutaneous Surgeons (India).

## MATERIALS AND METHODS

Following the ACSICON 2021 conference, only delegates ( $n = 155$ ) who attended ACSICON 2021 physically along with Pharma Company personnel ( $n = 76$ ) attending physically were polled over the internet using a mixed-methods approach. Using Google Forms, the attendees were given a 16-point questionnaire that addressed topics such as the COVID-19 prevention protocol, immunization status, infection rates during and after the conference, and overall satisfaction levels with the hybrid conference. The survey questionnaire was sent to 231 persons in total. This data were analyzed by the research team, few of the respondents left few questions unanswered.

## RESULTS

### General

In all, 231 attendees were sent the questionnaire out of which 229 undertook the survey. Of this, only 63% ( $n = 145$ ) attended all 3 days of the conference, 28% ( $n = 64$ ) attended 2 days, whereas 10% ( $n = 22$ ) attended only 1 day of the conference.

Of the 229 respondents, 32% ( $n = 73$ ) said they also visited areas other than the conference venue. The remaining 68% ( $n = 156$ ) of the respondents said they attended only the conference venue for all 3 days.

Seventeen per cent of the respondents ( $n = 39$ ) stated that they had previously been infected with the SARS CoV2 virus.

The RT-PCR (reverse transcription-polymerase chain reaction) test was taken by 44% of those who attended. All of them who took the test tested negative for the virus 48- 72 hours they attended the program.

**Table 1: COVID-19 test results of the respondents**

Test result	Outcome of the COVID-19 test
Negative	27(12.1%)
Not Applicable	196(87.5%)
Positive	1(0.4%)

**Table 2: Vaccination status of the respondents**

	Double	Single	None	Grand total
Negative	22	4	1	27
Not Applicable	182	13	1	196
Positive	1	0	0	1
No response	6	1	0	7
Grand total	211	18	2	231

**Table 3: Feedback of the respondents regarding ACSICON 2021**

Response	Was attending a hybrid conference more satisfying than a virtual conference?	Do you think hybrid conferencing is a safe option in the present scenario?
No	22(9.6%)	19(8.3%)
No Comments	19(8.3%)	0
Yes	189(82.2%)	209(91.7%)
Grand total	230	228

### Adherence to COVID-19 prevention protocols

Of the 231 physical attendees, 229 people responded to the survey about the safety standards that were implemented during ACSICON 2021. Among those who answered the survey, 86.5% ( $n = 198$ ) were of the opinion that the organizers had put in place all the necessary precautions. However, 12.2% ( $n = 28$ ) of the respondents were of the opinion that these measurements were not consistently followed across the 3-day conference period. When it came to personal consistency in terms of adherence to safety protocol measures set during the workshop, nearly 93% ( $n = 214$ ) reported that precautions like wearing masks, using sanitizers, and maintaining strict social distance measures were always followed. Of the remaining 7%, 6.1% of the respondents ( $n = 14$ ) reported that this was not always done.

### Case positivity during and after the conference

Of 229 respondents, a total of 224 responded to the question on the outcome of the COVID-19 test; 6 respondents felt that they had COVID-19 symptoms. Of them, four reported having symptoms in the first week of the conference and two reported with COVID-19-symptoms within the second week of the conference. All those who had symptoms tested themselves for COVID-19. In addition, 22 respondents who had no symptoms also tested themselves for COVID-19 after attending the conference. Out of the 28 individuals who underwent COVID-19 testing, only one tested positive [Table 1]. The only individual to test positive, was fully vaccinated with two doses of Covishield and had followed

all safety precautions in the conference, did not require hospitalization and had an uneventful recovery.

Six of the 229 respondents informed that they were on Ivermectin prophylaxis at the time of the conference.

### Status of vaccination

91.3% ( $n = 211$ ) of the attendees who responded had taken both the doses of the vaccine. 7.8% ( $n = 18$ ) had taken at least one dose, whereas only 0.9% ( $n = 2$ ) indicated that they had not taken the vaccine [Table 2]. Approximately 83.3% had taken Covishield, whereas 15.8% took Covaxin. Only 0.9% had taken another vaccine. The details on case positivity when cross-tabulated with the vaccination status are given in the table below. The single case that tested positive had already taken both doses of the vaccine.

### Overall impressions

More than 82.2% ( $n = 189$ ) of the respondents felt that a hybrid conference was a way more satisfying and enjoyable process than a virtual conference. Approximately 91.7% ( $n = 209$ ) of the doctors also felt that a hybrid conference was a safe option in the present scenario [Table 3].

## DISCUSSION

During the 3-day meeting, ACS(I) established safety procedures and protocols that were deemed to be sufficient and adequate in preventing COVID-19 related infection. Even though six persons showed signs of COVID-19 during the 2 weeks after the meeting, only one was proven to be infected. This suggests that those who had symptoms during and after the trip may have contracted a different illness.

The findings also show how enforcing safety precautions such as wearing masks, using hand sanitizers, and keeping social distance not only minimizes the chance of illness but also boosts the participants' confidence and morale. The selection of the venue was such that the halls were of larger size with adequate space to place the chairs 6 feet apart.

The large number of doctors who received the vaccination might have contributed to increasing the effectiveness in preventing COVID-19 from spreading during and after the conference. It is advised that vaccination certificates be examined and validated throughout the registration procedure for future participation in similar conferences.

The main takeaway from these findings is that hybrid conferences are favored more by the participants compared to purely virtual conferences. Furthermore, over 92% of the respondents thought the model was safe enough to be used in future medical conferences. The desire expressed and recommendations given by the attendees to conduct hybrid conferences demonstrate that they still would like to have some form of in-person training and interaction.

It is impossible to contextualize this data or claim that the results are representative of all trainees because there are no additional papers detailing in-depth study of conference feedback. Nonetheless, the results of ACSICON 2021 survey give some insight into trainee expectations from medical conferences.

Because respondents opted to attend the conference, the results are restricted by selection bias. The findings are significant since the cohort consisted of conference attendees; however, the study excludes many who were unable to attend or were ignorant of the conference. An alternate study that examined their viewpoints would give an overall view on the perceptions of medical professionals with respect to introducing hybrid training programs in future.

## CONCLUSION

It is recommended that, given the right safety protocols are established and in place, medical conferences can be conducted onsite predominantly, with a more intensive integration of technology to reach members of the professional community who cannot attend the live events. In conclusion, it is found that medical associations should prepare for an increasing number of hybrid events that include in-person and virtual participation, regardless of when and how the world rebounds from the pandemic. These events can accommodate a fair number of attendees while maintaining quality, engagement, and participation by using a single versatile hybrid event platform. Hybrid conferencing can be seen as a game changer as it helps facilitate interactions between all attendees before, during,

and after the event. This arrangement also has the potential to save associations a lot of money in terms of training and operations. Hence, the new manner of interaction in the dermatology fraternity might be viewed as a resilient system that has been overlooked in the past and should become standard practice in the medical community.

## Financial support and sponsorship

Nil.

## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

1. Merholz E-T, Landi M, Santos J, Montgomery FU, Horak P, Raeve PD. Statement of the European organisations of health professionals on COVID-19. Available from: <https://www.epso.org/article/statement-european-organisationshealth-professionals-COVID-19>. [Last accessed on 26 Nov 2021].
2. World Health Organization. Coronavirus disease (COVID-19) situation reports. Available from: [www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports](http://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports). [Last accessed on 26 Nov 2021].
3. Cheserem JB, Esene IN, Mahmud MR, Kalangu K, Sanoussi S, Musara A, *et al.* A continental survey on the impact of COVID-19 on neurosurgical training in Africa. *World Neurosurg* 2021;147:e8-15.
4. Stone T. Considerations and best practices for running hybrid meetings. *i4CP*. Available from: <https://www.i4cp.com/coronavirus/considerations-and-best-practices-for-running-hybrid-meetings>. [Last accessed on 26 Nov 2021].
5. Ruiz-Barrera MA, Agudelo-Arrieta M, Aponte-Caballero R, Gutierrez-Gomez S, Ruiz-Cardozo MA, Madrinan-Navia H, *et al.* Developing a web-based congress: The 2020 international web-based neurosurgery congress method. *World Neurosurg* 2021;148:e415-24.
6. Sharif S, Hafiz M. Virtual world spine 2020: The first online conference during the COVID pandemic. *World Neurosurg* 2021;150:256-8.