

# Leadership, teamwork and technology enabling the largest free and accessible event worldwide on COVID-19 management

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## ABSTRACT

**Objective** To report the experience of technology-enabling organisation and deployment of a large-scale free online scientific event about COVID-19, and to share leadership lessons learnt.

**Methods** The 'First Brazilian Congress of Clinical Evidence on COVID-19' took place between 3 May and 7 May 2021 and was hosted by the *Universidade Federal de Minas Gerais*, one of Brazil's top federal universities. Online platforms and a website were used for registration, as well as live transmission of the event, such as Zoom, YouTube and Even. A Situational Leadership framework was used to lead the team. Participants' satisfaction was evaluated through an online questionnaire.

**Results** There were overall 27 000 registrations. The transmission reached over 97 100 views, from Brazil, Cuba, Mexico and the UK. Conference's topics included the whole COVID-19 'system of care'. Speakers and moderators from all over Brazil and abroad were chosen according to their expertise on COVID-19 and on evidence-based medicine. Video testimonies were presented between sessions from people who could not work from home about what touched their heart during the pandemic. Accessibility was ensured through simultaneous translation to Brazilian sign language. From 2228 respondents of the satisfaction assessment questionnaire, 97.4% reported their expectations to be exceeded and 86.8% reported acquiring new knowledge about COVID-19.

**Conclusion** This experience showed that leadership, teamwork, motivation and technology enabled the dissemination of accessible scientific evidence on COVID-19 to a large audience through a free online event. Lessons learnt may be useful for the post-pandemic, for new-waves, as well as recovery.

quickly became public.<sup>5</sup> Healthcare professionals faced the difficulty of critically assessing and managing scientific evidence for daily updating. Additionally, social media usage as a source of information not only enabled the access of the general public to up-to-date information, but also allowed an intense spread of false news. In this brief report, we aimed to describe the experience of conducting a large-scale free online scientific event about COVID-19, and to share leadership lessons learnt.

## METHODS

The 'First Brazilian Congress of Clinical Evidence on COVID-19 Management' was developed as a collaborative effort between the *Universidade Federal de Minas Gerais*, one of the top Brazilian federal universities, Brazilian research institutions (IAT- *Instituto de Avaliação de Tecnologia em Saúde* and FAPEMIG- *Fundação de Amparo a Pesquisa de Minas Gerais*) and researchers from the COVID-19 Brazilian Registry's team.<sup>6</sup> It focused on translating evidence on COVID-19 management and the main concepts of evidence-based medicine to a language accessible to the population.

The event was free to the general public and had no specific funding (figures 1 and 2).

Additionally, we strove to include a human element throughout each one of the subevents, with several video testimonies from professionals that could not work from home, about what touched their heart during the pandemic. There was simultaneous translation to English for the first day and to the Brazilian sign language for advertising; the main platform used was Instagram, acquiring 4038 followers in 1 month and a peak of 415 918 impressions.

## Organisation, leadership and teamwork

Leadership and teamwork were essential for organising the event in 28 days. A Situational Leadership framework was used to lead the multidisciplinary team, composed of 23 volunteers.

The leaders were able to communicate the common goal as an inspiring vision, taking into account each member's skills, views and experiences, task/directive and relationship/supportive behaviours, focusing on enabling the full potential of each member of the team and team engagement, bringing together a team to pursue the common goal.

In this context, the team was divided into three groups, taking into account members' skills: management, scientific and publicity. Periodical

## BACKGROUND

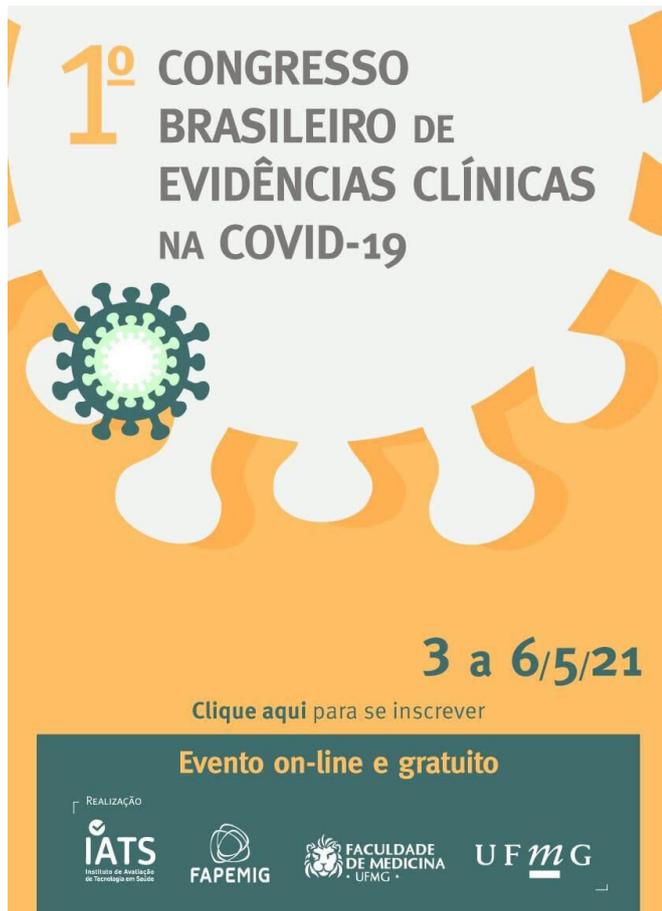
With the emergence of SARS-CoV-2 and spread of COVID-19 with increase in deaths, there has been a parallel effort by scientists and researchers around the world to make scientific evidence public with regard to SARS-CoV-2 genome mapping, transmission profile, diagnosis, treatment and vaccines.<sup>1</sup> Therefore, there was an exponential growth in the number of scientific publications on COVID-19. Thus, several researchers around the world have opted for instant dissemination of evidence through alternative methods, even before peer review including social media and preprints.<sup>2-4</sup>

Mass publication brought reflections regarding the quality and completeness of the evidence that



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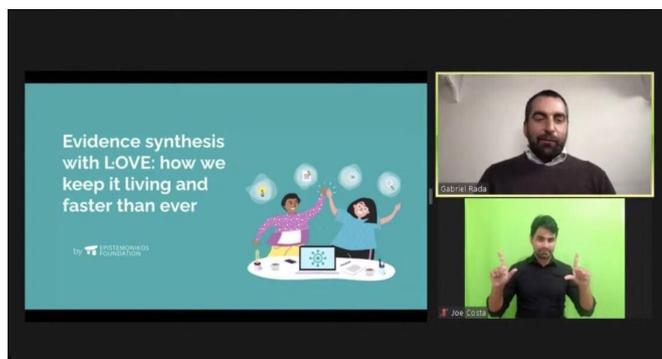


**Figure 1** Logo of the First Brazilian Congress on Scientific Evidence at COVID-19, 2021.

online meetings were held among each group and within the whole team. Constructive feedback and emphasis for each member of the team on how they played an integral part in making the event successful were discussed.

### Accessibility

Far beyond the goal of reaching a high number of participants in the event, a major concern of the organising team was to spread the knowledge about COVID-19 in an accessible form, allowing to reach as many people as possible. To this end, we sought partnerships with the Directorate of International Relations and the Center for Accessibility and Inclusion of the *Universidade Federal*



**Figure 2** Example of presentation from Dr Gabriel Rada, with Brazilian sign language interpretation.

*de Minas Gerais* for simultaneous translation and interpretation in Brazilian sign language to ensure accessibility and provide a satisfactory experience for all participants.

### Participants' satisfaction assessment

Participants' satisfaction was assessed at the end of the event by an online questionnaire using Google Forms, available in Portuguese and in English.

### RESULTS

The scientific programme included the whole COVID-19 'system of care', which ranges from disease prevention, management in primary care, prehospital care, hospital care, intensive care unit and post-COVID-19 symptoms management, as well as vaccines, mental health during the pandemic and associated costs (figure 1). Short lectures were followed by discussion and interaction with participants, in a system of live lectures and meetings that aimed to translate evidence into an accessible format to the public. There were sessions of abstract presentations as well, in which researchers from all over the country could present the results of their research projects.

Speakers and moderators were chosen according to their expertise on COVID-19 and evidence-based practice, including keynote speakers from other countries, such as Dr Gabriel Rada (figure 2).

Social media profiles were used for event dissemination and the platform Even3 was chosen for registration (available in Portuguese and English). There were over 28 000 registered participants from Brazil and other countries, such as Cuba, Mexico and the UK. Audience included health professionals and the general public mostly from Brazil, but also from all of those countries. Health professionals were responsible for 58.9% registrations, 5.6% were graduate students, 32.6% undergraduate students and 2.2% general audience.

Three main events were created, being the Brazilian Congress of Clinical Evidence on COVID-19 the major one. There was also an Academic Symposium of Clinical Evidence on COVID-19, in which undergraduate and graduate students from health-related areas were the main audience and were also able to present their research on the pandemic. At last, a 'Myths and truths on COVID-19' symposium focused on combating fake news that disseminated through the general population. The events were broadcast live on four different channels in YouTube. Up to 6 April 2022, there were 97 100 views.

From 2228 respondents to the satisfaction questionnaire, it was observed that residents from 27 Brazilian states attended this event (60.9% were from Brazil's southeast region, the most developed region in the country). We observed that 79.0% of the respondents were health professionals or health managers.

With regard to their satisfaction with the events, 97.4% of the participants replied that their expectations were exceeded and 86.8% reported acquiring new knowledge about COVID-19. Also 94.8% of participants reported that the Congress changed their practice and/or perspective on evidence-based medicine. Finally, 98.7% of the participants recommended the event to someone they know. After the end of the events, the Instagram profile remained as a source of reliable evidence on COVID-19 management (@congressobrasileiro.covid).

### DISCUSSION

The 'First Brazilian Congress of Clinical Evidence on COVID-19' represented the effort of a motivated group of volunteers in disseminating the main evidence and updates on COVID-19. In

a country which was severely hit by the pandemic and ravaged by fake news, the event successfully reached over 28 000 participants, including healthcare practitioners, health managers and the general population. It is possible to point out several lessons learnt from this experience, which are important for the pandemic and post-pandemic era.

Planning and organising an event in 28 days would not be possible without effective leadership, teamwork and motivation. Competent leadership was vital to enable the full potential of each member of the team; team engagement and motivation of volunteers, the majority of them undergraduate students, to bring knowledge and help to the population in such a short period's notice, working overtime, were key to make the events successful.

According to the Hersey-Blanchard Situational Leadership Theory, leaders can change their leadership styles based on the maturity of the people they are leading and the details of the task.<sup>7</sup> Therefore, in our point of view, choosing the Situational Leadership framework was the right decision, as the team was heterogeneous, some of them more motivated and faster learners than others. An example of how the framework was applied was through group division according to the volunteer's characteristics and abilities; therefore, people who presented more knowledge on technology were responsible for the social media and event platforms/transmission. Besides that, tasks were divided according to the volunteer's maturity and knowledge; therefore, undergraduate students in the beginning of their courses were responsible for creating more simple social media posts, such as showing the appropriate use of face masks. Meanwhile, those who were concluding their degrees created more complex social media posts, such as combating fake news on the use of chloroquine and hydroxychloroquine for COVID-19 treatment. Also, as the volunteers developed, more complex tasks were required from them. For team members, the event was also a great opportunity for the development of leadership and management skills, such as communication skills, networking, team management and leadership skills, which was outstanding for undergraduate medical students,<sup>8</sup> as most of whom had no previous idea of their capacity to change society. Constructive feedback was key in this context.<sup>9</sup>

In times of explosion of fake news and even decreased trust of the population in science,<sup>10</sup> university's support was essential to gain trust and confidence of the target audience, as well as to guarantee adequate structure for conference's online transmission. It emphasised the importance of academia (universities, research institutions and researchers) taking the lead in promoting educational activities for healthcare professionals and the population about conditions such as COVID-19 pandemic. Since COVID-19 was a new disease and the fact that the population looked up to politicians and public figures to understand what was currently happening, the health matter soon became a battle of political beliefs.<sup>11</sup> Therefore, healthcare leaders are key to communicating, in an accessible manner, evidence-based information to the population, healthcare professionals and health managers. In order to do that, it is essential for those leaders to improve communication skills that allow comprehension from the general population.

Technology allowed the participation of renowned speakers, some of whom would never be able to give lectures in person due to restrictions of time and travel costs to Brazil, taking into account the lack of budget for the event; and reached the target audience from all over Brazil and other countries. Besides that, COVID-19 lockdown and governmental travel rules could also be a barrier for speakers' access to an in-person event. New

formats of teleconferences allow interactions by participants through a live chat, accessible from smartphones, tablets and computers, from any location, only requiring an internet connection. There are no limitations in the number of participants, and it can be recorded and accessible for later review and participation of those who could not watch online, increasing the conference's reach. Technology also enabled organising the conference in a short period of time, during the second COVID-19 wave in Brazil, when those meetings were restricted due to quarantine measures. With that in mind, technology also allowed shared international learning in a vulnerable moment: the COVID-19 pandemic.

The fact that such a large event did not receive any funding from the pharmaceutical industry and was totally free of charge and from conflicts of interest was outstanding and was key to engage a large audience, giving the congress an innovative characteristic and inducing reflections about other conferences' charges, which in several instances were not reduced during the pandemic, even being in online format, what reduces significantly the costs. In times of financial crises induced by COVID-19 pandemic, it is of utmost importance to take this into account.

As for our limitations in the leadership strategy used, as there was a short period of time to organise the event to meet the needs imposed by the second wave of the pandemic and the explosion of fake news, even taking into account the different levels of motivation and conducting frequent online meetings, teamwork failed for some tasks, as well as effective communication of those who felt overloaded. The leaders felt that limitations imposed by online meetings could have been a barrier in this sense. Further studies should analyse if this hypothesis holds true for other instances.

In conclusion, this experience showed that leadership, teamwork, motivation and technology enabled the dissemination of accessible scientific evidence on COVID-19 to a large audience through a free online event.

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**Competing interests** None declared.

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**Author note** Dr Gabriel Rada is aware of the use of his image in the present article. He agreed to transfer his image rights for this picture.

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