



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

# Stay Connected and Up To Date: GI Meetings and Seminars and the Coronavirus Disease 2019 Pandemic



Eduardo Albéniz, MD,<sup>a</sup> Pedro Rosón, MD,<sup>b</sup> Luis Hernández-Villalba, MD,<sup>c</sup> and Mónica Enguita, PhD<sup>d</sup>

<sup>a</sup>Endoscopy Unit, Gastroenterology Department, Complejo Hospitalario de Navarra, Navarrabiomed Biomedical Research Center, Public University of Navarre, UPNA, Navarre Institute for Health Research, IdiSNA, Irunlarrea 3, Pamplona 31008, Navarra, Spain; <sup>b</sup>Hospital Quirón Salud, Málaga, Spain; <sup>c</sup>Hospital Santos Reyes, Aranda de Duero, Burgos, Spain; and <sup>d</sup>Navarrabiomed-UPNA-IDISNA, Pamplona. Spain

## ABSTRACT

The novel coronavirus disease 2019 has become an unprecedented global health and societal problem. The rapid spreading of this pandemic, together with the absence of effective treatments or vaccines, has led governments around the world to take drastic actions, including limiting the free movement of citizens, establishing maximum capacities and enforcing social distancing measures, among others. Consequently, major medical congresses, meetings, conferences, and workshops have been either cancelled or delayed. This situation has forced rapid changes in how the medical and scientific communities interact, and they now mainly meet using online technology. While political leaders have closed the borders of their countries as a logical public health measure, we have witnessed medical societies, clinicians, and scientists breaking other barriers and creating a new reality of global technological collaboration unlike anything seen before. An immense variety of webinars, online conferences, podcasts, courses, and many other forms of uploaded content can be seen from the comfort of one's own workplace or home at any time, and this has exponentially increased our reach; however, this great number of possibilities can be overwhelming, and it is more important than ever to separate wheat from chaff when deciding what online event to attend. The purpose of this article is to describe the impact of coronavirus disease 2019 on congresses and meetings, to examine how GI physicians feel about the emerging trend of online initiatives and to offer suggestions on how to balance web-based meetings and daily work.

*Keywords:* COVID-19; SARS-CoV-2; Webinar; Live event; Streaming.

## Introduction

Nobody could have predicted a few months ago that our lives could have changed so much in such a short time and that all this would be due to a new virus called severe acute respiratory syndrome-CoV-2, which causes a dangerous illness known as the coronavirus disease 2019 (COVID-19). The World Health Organization announced a global health emergency on January 30, 2020, based on reports of exponentially increasing cases of COVID-19 observed in China and other locations throughout the world; subsequently, on March 11, 2020, World Health Organization declared a pandemic situation.<sup>1-3</sup>

Today's globalized lifestyle has provided the perfect breeding ground for the rapid worldwide spread of COVID-19.<sup>4</sup> Medical staff are one of the groups most at risk for contracting COVID-19 because they are directly exposed to infected patients. Medical and paramedical personnel are a strategic sector in society, and proper training must be given to all hospital staff on methods of prevention and protection so that they can be competent enough to protect themselves and others from this deadly disease.

At present, we are not able to effectively treat COVID-19 since neither targeted vaccines nor specific antiviral drugs for treating human severe acute respiratory

Abbreviations: AGA, American Gastroenterological Association; COVID-19, coronavirus disease 2019; DDW, Digestive Disease Week; ESD, endoscopic submucosal dissection; ESGE, European Society of Gastrointestinal Endoscopy; GI, Gastrointestinal; KOL, key opinion leaders; SARS, severe acute respiratory syndrome; UEGW, United European Gastroenterology Week; WHO, World Health Organization

Most current article

© 2020 Elsevier Inc. All rights reserved.

2590-0307

<https://doi.org/10.1016/j.tige.2020.11.001>

syndrome-CoV2 infections are available.<sup>5</sup> Most nations are currently adopting measures to prevent the spread of this virus by implementing preventive and control strategies.

The main strategies adopted have been closing borders, limiting the free movement of citizens and limiting the capacity of meetings and social events.<sup>2,6</sup> At an individual level, the use of face masks, frequent hand washing, and social distancing have been established as norms to reduce the number of infections. Such drastic measures are necessary considering the circumstances.

As a logical result of the measures that have inevitably been taken, gatherings involving large numbers of people have been officially canceled. The inability to freely travel and the need to maintain safe social distances have caused nearly all in-person medical conferences to be canceled. The attempts of some medical societies to merely delay these events may be in vain since there is no clear date in sight for the return to normality. This current scenario, also called the “new normality,” has modified many habits of our daily practice; for example, face-to-face meetings are avoided or restricted to small groups, and we have to talk to our colleagues or patients at a distance of 1.5-2 meters.

During the previous few months of the COVID-19 pandemic, while political leaders have closed the borders of their countries as a logical public health measure, we have witnessed scientists breaking other barriers, engaging in global collaboration unlike anything seen before.<sup>7</sup>

The purpose of this article is to describe the impact of COVID-19 on congresses and meetings, to examine how GI physicians feel about the emerging trend of online events and to offer suggestions on how to balance web-based meetings and daily work.

### The impact of COVID-19 on congresses and meetings

As Spanish citizens, we saw the pandemic hit Wuhan, China, and then spread like a summer fire over Europe, particularly in northern Italy. Initially, we were mere spectators of the event, and the virus only seemed to be in the news. Our life and work continued without great changes. GI services met in the morning, and there were still small national scientific meetings or training courses.

Then, suddenly, the virus appeared in our country. At first, there were few cases, nobody really knew what to do, and there were many contradictory rules; then, like a massive explosion, the virus spread throughout the country, and the first congresses to be cancelled were the medical meetings planned just before the complete lockdown began.

In March 2020, the national congress for our specialty (Spanish Association of Gastroenterology) was the first one suspended. This was followed by the European Society of Gastrointestinal Endoscopy meeting (ESGE days)

in April, the Digestive Disease Week in May and another national congress, the Spanish Society of Digestive Pathology, in June.

Anticipating the unfavorable events to come, the United European Gastroenterology Week (UEGW) also suspended its annual face-to-face meeting in October. Similarly, other countries had to cancel or change their large medical conferences.

The responses of medical societies to attempt to overcome these limitations have differed. They have taken advantage of online technology to organize safe virtual meetings and webinars and to upload interesting material in their websites so that it is accessible to everybody online.

In addition to the regular publication of ESGE days' abstracts in the Endoscopy Journal, ESGE has scheduled a series of webinars that use the best communications technologies and are divided by area of interest.

The DDW, sponsored by the American Gastroenterological Association, American Society for Gastrointestinal Endoscopy and American Association for the Study of Liver Disease, also publishes their abstracts in Gastroenterology and Gastrointestinal Endoscopy journals and has placed all the material from its posters and oral communications on its website so that it is accessible to researchers online.

United European Gastroenterology Week (UEGW) has “gone virtual” and announced a streaming congress.

Some events with live cases have been possible; the “Malaga Live 2020” carried out in Spain included an optical diagnosis course and a day featuring endoscopic submucosal dissection and third space endoscopy cases. Another interesting initiative was “Endoscopy on Air,” which featured cases found in and commented on from various cities around the world. Likewise, multiple events in different countries, which it would be impossible to create a comprehensive list of, have included activities of great scientific interest.

Therefore, despite the widespread cancellation of events, we have had the opportunity to enjoy much of the content presented by the most notable congresses in our specialty, and these interesting new formats appear to be here to stay.

### How do GI physicians feel about the emerging trend of webinars and online meetings?

To a greater or lesser extent, we have all experienced negative consequences of the lockdown, and the cancellation of face-to-face scientific meetings has been accompanied by great setbacks in the continued training of professionals.

This has changed the way we interact with each other and how we work together, forcing us to rely on web-based software to meet and exchange files and information in real time.

Numerous efforts have been made to translate previously planned congresses to online formats, adding to the many private initiatives from known and unknown professionals and industry-promoted webinars.

Since online meetings do not require travel or accommodation and many have been offered free of charge, there are many events that one can attend, making it important to separate the wheat from the chaff when deciding which events to choose.

The need to be able to communicate through various types of online systems has been realized, and that has allowed us to maintain contact with close connections and to telework. Something similar has happened with webinars; some innovative people saw the potential of this communication system and used it from the outset, but little by little, the online content-sharing announcements filled email inboxes and personal and work social networking platforms.

There are very diverse initiatives producing webinars, from fairly unknown people seeking to develop their ideas and share them with the scientific world to key opinion leaders (KOLs) who cannot pass up the opportunity to hold a webinar. Moreover, commercial brands that have not been able to access professionals directly need to continue promoting and selling their products. In fact, the medical industry has their own events with KOLs, who often participate in multiple events sponsored by different commercial brands. It should be emphasized that the economic support of the commercial brands can cause an overload of conferences on the same topics with the consequent abandonment of multiple relevant subjects that are not so attractive for the industry.

Additionally, many other online-based initiatives, such as podcasts, videocasts and online learning platforms, have received a push forward and are trying to increase their reach.

As we have previously commented, most scientific societies do not want to miss the opportunity to have a presence in the virtual world. One notable difference from face-to-face events, which are concentrated in 1 to 4 days, online events have shorter formats but with sessions spaced out across time, meaning that in one afternoon (the most common format), one may have been invited to 3 different events.

The avalanche of content (podcasts, videocasts, online learning platforms, webinars, live conferences, etc) in a globalized environment where one can connect to any country of the world at any time, may make people feel oversaturated.

## How can we benefit from all this??

### Pros

How can we benefit from all this? What are the “pros”?

As we do not need to physically be in one place for a meeting, our potential reach increases to the entire world. High-quality material is accessible to everyone without

the need to fly thousands of kilometers, which involves both significant financial and personal commitments.

The online format has the advantage of immediacy; if one is not interested in something, one can disconnect, and if one is interested but cannot attend at the moment, the event can be recorded and watched later or even stored. The smallest field in gastroenterology can have a proper audience, and we can interact with KOLs and experts in all fields from our armchairs even more easily than at face-to-face events. Just as when we do bibliographic searches or go to large conferences with many simultaneous sessions, the key is selecting the content and the speakers.

One of the benefits of this new digital world is precisely this possibility of developing new ways to interact and eliminating obsolete patterns, but these new forms of interaction have not developed at the same speed as the new digital content.

Of great benefit to these various events is the guarantee or endorsement of societies or institutions and their official accreditation (eg, continuing medical education credits).

In addition to social media, online platforms and apps for meetings could be integrated into future meetings and congresses. Some interesting ideas have been suggested in this regard, such as preliminary exercises on social media to determine the meeting content, the real-time or delayed streaming of all of the scientific content of the meeting, virtual poster “walks” and open and continuous Q&A sessions for poster presenters that can be extended beyond the duration of the presentation.<sup>8</sup>

Another point to highlight is that organizing an online event is much easier. Only a small team is needed, there is no location to coordinate or rooms to book, and there are no projectors, caterers, entertainment, travel, or hotel reservations to worry about. Leading scientists are also more likely to accept invitations to speak at online conferences because the time commitment is significantly less.<sup>9-13</sup> All of this can contribute to reducing the carbon emissions that we generate.<sup>14</sup>

### Cons

In addition to the previously mentioned online content overload, we cannot let the trees prevent us from seeing the forest, and national and international societies must coordinate their offerings, so we are not drowned in a flood of specialty webinars.

It should be borne in mind that the perspective of some senior specialists is very different from that of fellows in training or more general specialists, who have seen their learning opportunities greatly diminished. Much of the online content being offered is, in most cases, too specialized, and in many others, it is also highly biased by the biomedical industry. Basic content such as that offered in most face-to-face conferences is lacking, and medical societies must focus on this particular issue. It is therefore essential to implement virtual content with general webinars that are essential to improve the quality of care on a daily basis.

Of course, the main drawback to this virtual world is that much of the human interaction that allows us to connect at a scientific and extra-scientific level is lost in the online world. Thus, networking becomes more complex, and the social relationships that form at face-to-face events are greatly impeded.

### How to balance web-based meetings and daily work

At this moment (July to October 2020), 2 circumstances are converging. On the one hand, a vast amount of online content and a large number of web activities are currently available, and this is expected to continue. On the other hand, the work overload following the lockdown has increased, with waiting lists in most hospitals substantially increasing.

During the online events that last all day, the vast majority of professionals are working at the same time, and while part of the recorded content can be viewed later, the obligations of daily and family life often permit access to only a very limited part of that content. Previously, when we attended a congress in person, it was normal to request that time off work as a "training day", so there was time outside of the normal workload to dedicate to such events. The abrupt change in the learning models has meant that there has been no time for administrative structures to adjust to this new situation and that as a general rule, there is no time available for professionals to attend virtual learning sessions, which have inevitably been added as extra work on top of daily tasks.

With the afternoon webinar format, work distribution becomes easier. If this webinar is clearly interesting and educational, one can connect and watch it live or access it at another time. Having the content on the web allows one to save the information or bookmark it as personal training content, as is done with PDFs of interesting articles. One advantage of viewing recorded events is that the viewing time can be shortened by accessing the parts that are most interesting. If the situation continues as is for the foreseeable future, we think doctors should continue to be given time for training. Most likely, the best method for ensuring time to attend the most important events will be to request the necessary time off to be able to attend them, even if it is virtually. This will force us to be tremendously selective with the events we choose, even more so than usual.

In purely educational programs, virtual events are a great advantage, and we think this format will clearly remain a primary mode of learning in medical education. As for working groups, which usually meet at face-to-face congresses, it is necessary to find a better way for them to engage in synchronic interactions.

Another aspect to highlight is family conciliation. When at work, it is clear what one is doing, but what happens when one is on the computer at home? In the case of non-single-parent families, this is not always well understood, and like before the pandemic, the objective is to reach a consensus and achieve a good balance between

one's work and personal life. As with other content on smartphones, scientific content can be overwhelming, and we must learn to disconnect, or we risk being on the phone or computer all day.

### What are the positives of all of this? remarks

A new reality has come to stay. The format is not new, but what is novel is that these new dimensions have become ordinary.

Most likely, both face-to-face and virtual formats will be reduced when the pandemic is eventually under control, and both will coexist in the new normality.

The negative aspects of exclusively using an online format are as follows: the oversaturation of content sometimes highly driven by the medical industry and overly specialized, a lack of time dedicated to each event, the difficulty of interacting with the speaker during some activities, and the impossibility of networking with colleagues from one's specialty and withing the industry in short periods of time.

But colleagues, let us not dismiss the positive aspects of this change: the variety and immediacy of the content being presented; the possibility of saving or archiving talks for later; the ability to actively decide which subjects, speakers and content to view; the comfort of viewing content from one's own workplace or home at any time; the optimization of the time spent on events, with consequent gains in family conciliation; and, finally, the reduction in carbon emissions.

As a final conclusion, we would like to point out that we always have to take advantage of problematic situations, that technology is there to serve us and not vice versa and that we must take full advantage of that technology. The opportunities created by this exceptional health situation must be mastered scientifically and organizationally to be able to assist in the continuing education of gastroenterologists. Of course, we will persevere in the COVID-19 pandemic. Never before, we have had so many experts in so many countries focused simultaneously on a single topic, and this is possible thanks to new technologies.

### Authors' contributions

EA, PJ, LH, and ME Wrote and critically supervised the manuscript. LH coordinates the podcasts of the Spanish Association of Gastroenterology.

### REFERENCES

1. Sohrabi C, Alsafi Z, O'Neill N, Khan M, Kerwan A, Al-Jabir A, et al. World health organization declares global emergency: a review of the 2019 novel coronavirus (COVID-19). *Int J Surg* 2020. <https://doi.org/10.1016/j.ijisu.2020.02.034>.
2. Remuzzi A, Remuzzi G. COVID-19 and Italy: what next? *Lancet* 2020. [https://doi.org/10.1016/S0140-6736\(20\)30627-9](https://doi.org/10.1016/S0140-6736(20)30627-9).
3. Johns Hopkins Coronavirus Resource Center. COVID-19 Map - Johns Hopkins Coronavirus Resource Center. Johns Hopkins Coronavirus Resource Center.



4. Magro F, Abreu C, Rahier JF. The daily impact of COVID-19 in gastroenterology. *United Eur Gastroenterol J* 2020. <https://doi.org/10.1177/2050640620920157>.
  5. Dhama K, Sharun K, Tiwari R, Dadar M, Malik YS, Singh KP, et al. COVID-19, an emerging coronavirus infection: advances and prospects in designing and developing vaccines, immunotherapeutics, and therapeutics. *Hum Vaccines Immunother* 2020. <https://doi.org/10.1080/21645515.2020.1735227>.
  6. Mohamed K, Rodríguez-Román E, Rahmani F, Zhang H, Ivanovska M, Makka SA, et al. Borderless collaboration is needed for COVID-19; a disease that knows no borders. *Infect Control Hosp Epidemiol* 2020. <https://doi.org/10.1017/ice.2020.162>.
  7. Momtazmanesh S, Ochs H, Uddin L, Perc M, Routes JM, Vieira DN, et al. All together to fight novel coronavirus disease (COVID-19). *Am J Trop Med Hyg* 2020. <https://doi.org/10.4269/ajtmh.20-0281>.
  8. Porpiglia F, Checcucci E, Autorino R, Amparore D, Cooperberg MR MR, Ficarra V, et al. Traditional and virtual congress meetings during the COVID-19 pandemic and the post-COVID-19 era: is it time to change the paradigm? *Eur Urol* 2020. <https://doi.org/10.1016/j.eururo.2020.04.018>.
  9. Achakulvisut T, Ruangrong T, Bilgin I, Van Den Bossche S, Wyble B, Goodman DF, et al. Improving on legacy conferences by moving online. *Elife* 2020. <https://doi.org/10.7554/ELIFE.57892>.
  10. Lazzereschi L, Kirtley D. Provision of e-learning programmes to replace undergraduate medical students' clinical general practice attachments during COVID-19 stand-down: a student perspective. *Educ Prim Care* 2020. <https://doi.org/10.1080/14739879.2020.1786468>.
  11. Khanna Rohit C, Honavar Santosh G, Metla AL, Bhattacharya A, Maulik PK. Psychological impact of COVID-19 on ophthalmologists-in-training and practising ophthalmologists in India. *Indian J Ophthalmol* 2020;68(6):994-8. [https://doi.org/10.4103/ijo.IJO\\_1458\\_20](https://doi.org/10.4103/ijo.IJO_1458_20).
  12. Agarwal S, Sabadia S, Abou-Fayssal N, Kurzweil A, Balcer LJ, Galetta SL, et al. Training in neurology: flexibility and adaptability of a neurology training program at the epicenter of COVID-19. *Neurology* 2020. <https://doi.org/10.1212/WNL.0000000000009675>.
  13. McDowell L, Goode S, Sundaresan P. Adapting to a global pandemic through live virtual delivery of a cancer collaborative trial group conference: the TROG 2020 experience. *J Med Imaging Radiat Oncol* 2020. <https://doi.org/10.1111/1754-9485.13047.LK>.
  14. Quinton JN. Cutting the carbon cost of academic travel. *Nat Rev Earth Environ* 2020. <https://doi.org/10.1038/s43017-019-0008-3>.
- 
- Correspondence**  
Address correspondence to: Eduardo Albéniz, MD, Endoscopy Unit, Gastroenterology Department, Complejo Hospitalario de Navarra, Navarrabiomed Biomedical Research Center, Public University of Navarre, UPNA. Navarre Institute for Health Research, IdiSNA. Irunlarrea 3, 31008, Navarra, Spain; e-mail: [edualbeniz@hotmail.com](mailto:edualbeniz@hotmail.com)
- Acknowledgment**  
We would like to express our gratitude to Navarrabiomed Biomedical Research Center for providing all the necessary support to carry out research in the endoscopy field.
- Conflicts of interest**  
PR and EA are organizers of Malaga Live, and they perform sponsored online training events (webinars and live cases) on the web: <https://www.institutoendoscopiaavanzada.com>. Other authors have no conflict of interest.
- Guarantor of the article: Eduardo Albéniz.
- Funding**  
The main author has a grant from "La Caixa/Caja Navarra" Foundation (ID [100010434](https://doi.org/10.100010434); Project [PR15/11100006](https://doi.org/10.11100006)).