Have We Passed the Peak? The COVID-19 Plastic Surgery Webinar Pandemic

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The spread of COVID-19, declared a pandemic by the World Health Organization on March 11, 2020, has created an extremely challenging and difficult time for most people around the world. However, it has also spawned a parallel yet distinctly different educational pandemic throughout the global plastic surgery community—a webinar pandemic.

A webinar is a seminar broadcast via the World Wide Web. It allows interaction between speaker and attendees, and is able to replicate, to an extent, more traditional means of medical teaching.

The value of webinars has been previously recognized in plastic surgery, allowing recognized speakers to reach a broader audience. Although webinars can be traced back to the early years of the Internet, a significantly increased frequency of webinars has been noted in the context of the COVID-19 pandemic, particularly following the introduction of social distancing. Our objective herein is to describe this phenomenon within the global plastic surgery community.

Following PRISMA guidelines we conducted a systematic search with the Google search engine, on May 20, 2020, to identify webinars taking place involving plastic, aesthetic, and reconstructive surgery topics, between January 1, 2020 and May 24, 2020. The official websites and social media feeds of relevant international scientific societies, associations, journals, and plastic surgery-related industries were also searched (Figure 1). Free educational webinars were included, with no language restrictions. Those requiring payment, special permissions, or prerecorded podcast/webcasts were excluded.

Table 1 summarizes these systematic search results, including the number of webinar sessions, organizing bodies, topics covered, length, and platform used. We identified a total of 460 webinars during the period studied. Aesthetic surgery was the most frequent topic taught (58%) and Zoom the most common platform (65%). A mean of 3.2 webinars were broadcast daily, with a total average time of 215 minutes per day. There was a significant increase in numbers of webinars between the first (January 6 to February 2, 2020) and last (April 27 to May 24, 2020) months studied, with 8 webinars in the first month and 260 webinars in the most recent month—representing a 3250% increase. The overall trend in webinar sessions per week is shown in Figure 2.

We note that it is likely we have not been able to identify every single webinar that has taken place worldwide.
during the time period studied. Nevertheless, our results demonstrate an unprecedented increase in the frequency of plastic surgery webinars that have been made available globally to students, trainees, and senior plastic surgeons around the world. These have covered most aspects of our specialty, with renowned speakers being able to reach a global audience.

COVID-19 has overturned and overwhelmed healthcare services in almost all countries. A significant proportion of nonurgent elective and trauma surgeries have been rationalized and cancelled to increase intensive-care capacity and allow staff redeployment. Medical courses, conferences, and examinations have also been cancelled. As a result, surgical trainees have been deprived of hands-on and traditional teaching for the greater good. To date, it is still uncertain when these activities will resume, and meanwhile, plastic surgery services will need to adapt to continue medical and surgical training.5,6

Webinars have proven to be the first and most direct way in which this has already happened, and, we believe, are a method that is here to stay. Webinars have enabled continued learning and development of plastic surgeons around the world, around their clinical work against COVID-19, and helped to bring the plastic surgery community together in ways that have not been seen in such a remote and online fashion before. Also, by being online, venue and traveling costs for faculty and audience are nonexistent, making it a “green” option.
Table 1. Webinar Sessions Found Per Organizing Institution

| Organizing or sponsoring institution                                      | Topics covered            | No. of webinar sessions | Platform                      | Total minutes* |
|---------------------------------------------------------------------------|---------------------------|-------------------------|-------------------------------|----------------|
| Federación Ibero Latinoamericana de Cirugía Plástica (FILACP)             | Aesthetic/reconstructive  | 47                      | GoToMeeting                   | 2200           |
| AO Foundation                                                             | Reconstructive            | 45                      | Zoom                          | 2831           |
| Aesthetic Medical Practitioner                                            | Aesthetic/COVID-19        | 40                      | Zoom/GoToMeeting              | 2579           |
| International Microsurgery Club                                          | reconstructive            | 36                      | Facebook Live/Webex           | 2642           |
| Gea Hospital, Mexico City/Motiva                                            | reconstructive            | 35                      | Zoom                          | 800            |
| GCAacademy.com                                                            | Aesthetic                 | 20                      | Zoom/GoToMeeting              | 1373           |
| SAPS Academy                                                              | Aesthetic                 | 20                      | SAPS Network app              | 1640           |
| IMCAS Academy                                                             | Aesthetic                 | 16                      | IMCAS web                     | 1739           |
| Plastic Surgery Trainees Association (PLASTA)                             | reconstructive            | 16                      | Zoom                          | 1020           |
| International Confederation of Plastic Surgery Societies (ICOPLAST)       | reconstructive/aesthetic  | 15                      | Zoom                          | 1215           |
| Aesthetic Surgery Journal                                                 | Aesthetic                 | 13                      | Zoom                          | 1350           |
| The Aesthetic Society/Sientra                                             | COVID-19/aesthetic        | 13                      | Zoom                          | 836            |
| European Academy of Facial Plastic Surgery (EAFPS)                        | Aesthetic                 | 12                      | Zoom                          | 750            |
| OrthoTVonline.com                                                         | reconstructive            | 11                      | Zoom                          | 1746           |
| Polytech Health Aesthetics                                                | Aesthetic                 | 11                      | Zoom/YouTube Live             | 760            |
| British Society for Surgery of the Hand (BSSH)/The Pulvertaft Hand Centre | reconstructive            | 10                      | Zoom                          | 680            |
| American Society of Plastic Surgeons (ASPS)                              | COVID-19                  | 10                      | Zoom                          | 680            |
| Motiva                                                                    | Aesthetic                 | 9                       | Zoom                          | 533            |
| American Academy of Cosmetic Surgery                                     | Aesthetic                 | 8                       | Zoom                          | 465            |
| American Council of Academic Plastic Surgeons (ACAPS)                    | Aesthetic                 | 7                       | Zoom                          | Not available  |
| International Society of Aesthetic Plastic Surgery (ISAPS)                | Aesthetic                 | 6                       | BeThereGlobal                 | 504            |
| Emory University Aesthetic Tutorials (Dr Foad Nahai)                      | Aesthetic                 | 5                       | Facebook/YouTube              | 375            |
| British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS) | COVID-19                 | 5                       | Zoom                          | 385            |
| Aestique.com                                                              | Aesthetic                 | 5                       | Not available                 | 270            |
| Total definer                                                             | Aesthetic                 | 5                       | GoToMeeting                   | 382            |
| Stoke Mandeville Hospital, Aylesbury, UK                                  | reconstructive            | 5                       | Zoom                          | 300            |
| Webinars.edu.org                                                          | Aesthetic                 | 4                       | GoToMeeting                   | 373            |
| Asociación Latinoamericana de Microcirugía (ALAM)                         | reconstructive            | 4                       | GoToMeeting                   | 338            |
| Pan-Thames Deanery/Imperial College, London, UK                           | reconstructive/aesthetic  | 4                       | Zoom                          | 240            |
Table 1. Continued

| Organizing or sponsoring institution | Topics covered | No. of webinar sessions | Platform | Total minutes* |
|-------------------------------------|----------------|-------------------------|----------|---------------|
| Aesthetics Biomedical               | Aesthetic      | 3                       | GoToMeeting | 264           |
| KLS Martin Groups/IBS Webucation    | Reconstructive | 3                       | GoToMeeting | 210           |
| Allergan Medical Institute          | Aesthetic      | 3                       | Webex/Zoom | 244           |
| Canniesburn Plastic Surgery Unit, Glasgow, UK | Reconstructive | 3                       | Zoom      | 180           |
| jjinsitute.com                      | Aesthetic      | 2                       | Not available | 120           |
| St Andrews Centre for Plastic Surgery and Burns, Chelmsford, UK | Aesthetic/reconstructive | 2                       | Zoom      | 120           |
| British Association of Aesthetic Plastic Surgeons (BAAPS)/Motiva | Aesthetic | 1                       | Not available | Not available |
| International Society of Plastic and Regenerative Surgeons (ISPRES) | COVID-19 | 1                       | Zoom      | 120           |
| American Association of Plastic Surgeons (AAPS) | Reconstructive | 1                       | YouTube   | 60            |
| Journal of Plastic, Reconstructive and Aesthetic Surgery (JPRAS) | Reconstructive | 1                       | Zoom      | 60            |
| Plastic Surgery NY                  | Aesthetic      | 1                       | PSNY web  | 95            |
| Austin Weston                       | Aesthetic      | 1                       | GoToMeeting | 120           |
| European Association of Societies of Aesthetic Plastic Surgery (EASAPS) | COVID-19 | 1                       | BeThereGlobal | 116           |
| Total webinar time from January 1 to May 24, 2020b | | | | 31,195 |

* Total length in minutes of all webinars conducted. **Webinars for which information about length was unavailable were considered by default to be 60 minutes long.

Figure 2. Weekly webinar trend from January 1 to May 24, 2020.

Going forward, it will be vital to develop improved means of sharing these educational resources between plastic surgery associations and institutions, in order to maximize their educational value for all current and future training of plastic surgeons. This is true of both increasing access to each live webinar as well as their recorded content for subsequent on-demand learning. Furthermore, the quantity and quality of each webinar series should be monitored, and guidelines developed to enable useful learning opportunities as efficiently and safely as possible. Patients’ right to privacy, adequate consent, and copyright protection should not be forgotten amid the current webinar enthusiasm.

We plan to further investigate the impact of webinars and invite plastic surgeons worldwide to collaborate and send their ideas for webinar content and quality control via correspondence and social media, so that we may all make the most of what this webinar pandemic has to offer.

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