Twelve tips for adapting during the COVID pandemic, through converting a physical conference into a virtual equivalent

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Abstract

Background
Attending, presenting and being inspired by conferences plays a vital role in medical education. By preventing physical gatherings, the 2020 coronavirus pandemic has presented a new unparalleled challenge to delivering this vital component of a medical education.

Aims
The pressure of the contagion has mandated adaption and the adoption of digital solutions. This article aims to inform of a 12-step chronological process to convert a physical conference into a virtual equivalent with insights from first-hand experience and review of relevant literature.

Results
This article provides the tools to deliver a virtual conference, but in addition provides translatable directions as to the use of online resources in medical education.

Conclusions
These tips demonstrate one form of adaption that was mandated by an external force, however the success of such a digital solution has the potential to out-live the virus and become a tool instead of a resort in exceptional circumstances.

Keywords: Coronavirus; COVID; conferences; technology; virtual; education

Introduction

For decades conferences have been fundamental to the scientific community as a way to communicate discoveries,
to inform of new techniques and ideas, and most importantly to engage and inspire others to continue to contribute to the world's growing body of scientific evidence (Welch et al., 2010). The role of conferences in medical education is five-fold. Firstly, through attending conferences, students can explore interests out with the curriculum and are given the opportunity to expand their network by meeting like-minded peers and speakers. In addition, conferences provide a stimulating research environment that can serve to empower students to conduct their own research and on doing so afford students with the chance to progress their presentation skills (Funston, 2015). Lastly, through attending a conference, some students may be inspired to develop their leadership skills through running or joining a committee responsible for organising a future conference.

The 2020 coronavirus pandemic presented unfounded disruption to the delivery of medical education and has forced swift adaption in order to ensure continuity in teaching and appropriate preparation for students to become competent doctors at their graduation (Ferrel and Ryan, 2020). In particular, as large gatherings of individuals, conferences were major potential sites of coronavirus transmission (Ebrahim and Memish, 2020). The contagion presented the challenge of hosting a conference where individuals were not allowed to be within two metres of each other and speakers and delegates could not travel more than five miles to attend. The increasing number of cancellations/postponements of conferences led to demand to innovate and adopt virtual alternatives (Goldust et al., 2020).

Over the last two decades a digital revolution has occurred and despite its large range of applications, its potential has been slow to impact on the way that medical education is delivered (Guze, 2015). Studies in the past piloting virtual conferences have endorsed them as "exciting opportunities for facilitating and improving scientific meetings" and more environmentally friendly ways to encourage international discussion (Welch et al., 2010, Abbot, 2019). However, virtual conferences were yet to be a significant feature of the scientific sphere till the coronavirus pandemic, where the community begun to accept virtual substitutes as potential solutions and have started to make use of and adapt existing digital tools to run successful conferences (Salomon and Feldman, 2020).

In this "12 tips" article, I will discuss a strategy to host a virtual conference, that has been educated by my own experience of running a conference during the COVID pandemic, the perspective of my peers and a review of the relevant literature. I will chronologically address the the steps necessary to transform an idea for a conference into a reality, whilst drawing attention to the challenges that a virtual conference entails and the tips that will give you the tools to solve them.

**Tips for laying the foundations for a successful conference**

**Tip 1: Decide on the message that you want to deliver**
A conference is a vehicle to communicate a new and exciting message. This message may be content orientated such as the opportunity to explore a certain subset of a speciality or encourage cross talk across multiple disciplines, or it may be skill-centred, focused on structuring the conference to ensure that attendees have the opportunity to develop skills such as presenting and networking in unique and effective ways. Both content-knowledge and skill development are vital to a medical education and delivering them in novel and interactive ways via a conference is a way to increase engagement and retention amongst attendees (Jerardi et al., 2019).

In practice, to decide on a message it is important first to evaluate one's own initial reasons for getting involved in the organisation of the conference. This could be from identifying a gap in the delivery of medical education, whereby a topic or skill is under taught or the idea may arise from being inspired by a certain component of medicine and linking with like-minded individuals keen to explore the idea in greater depth.
Whether the conference is a unique conference that is being run for the first time or it is an annual iteration, being involved in its organisation necessitates a core message that is fresh and personal for an individual's own growth as well as a successful conference.

Tip 2: Model your audience
A conference’s message as well as being personal must also unify your audience (Corpas et al., 2019). When conceptualising the conference, its design should be led by a ‘model’ attendee. This is an idealised avatar of a member of the prospective audience who is assigned a location- who they are and where they are, interests- what they would attend, and goals- what do they hope to achieve through going to a conference. This is a principle adapted from a marketing tactic- "lookalike modelling", taught to businesses (Ewan, 2019). Whilst a conference is not a business and its role and purpose can be said to be very different, there are transferable principles. A product that is not wanted, no one will buy. A message that people do not identify with, will not translate to a successful conference.

Tip 3: Find the speakers that fit
The speakers that are invited to a conference are pivotal in delivering the conference’s message (Wyatt et al., 1999). Finding the right speakers is one of the hardest and most rewarding tasks. Researching them in depth before not only allows their fit to the conference to be assessed but if the conference’s message links to an aspect of their research it increases the likelihood that the speaker will be excited about the conference’s concept and agree to present when contacted. "Fit to the conference” not only depends on the content but also their style and if necessary, their willingness adapt. In addition, an effective tactic for encouraging audience engagement rather than passive listening is to organise speakers into sessions that address components of the theme and then bring speakers together in interactive panels to encourage discussion (Wyatt et al., 1999). It is important to be aware that being the smartest, most forward thinker in a field, does not make the best teacher or mentor.

Tip 4: Form a motivated and reliable committee
One of the make or break components of turning an idea for a conference into an event is having a core group of dedicated and conscientious members. An individual effort will always be surpassed by the combined force of a united team (Corpas et al., 2019). There are two main challenges to overcome as a leader- choosing a team and maintaining a harmonious and effective working environment. Many articles have been written advising on these points, but the take home messages are to find people that share the goal of the conference who will bring attributes that are not already represented in the committee and to hold others to the same standard that is set by the manner in which the team is led (Corpas et al., 2019).

Tips for adapting to a virtual format

Tip 5: Take the virtual step
Currently the step to convert from a standard format physical conference to a digital one is seen as a deviation from the norm rather than a selection from two options. This is attributable to the general lack of familiarity with a virtual set up (Mattey, 2019). However, objectively digital conferences afford several benefits. A key advantage is the ability for both speakers and delegates to tune in from wherever they choose, bypassing location access barriers (Goldust et al., 2020). In addition, interactivity with the speakers can be increased through chat functions that serve to anonymise attendees and remove fear of embarrassment at contributions or questions (Murdoch et al., 2014.) Furthermore, hosting a conference virtually mitigates the significant costs of a venue and catering (Welch et al., 2010). However, these advantages must be weighed against losing experiences that the luxury of a physical conference affords, in particular limiting individual freedom to explore a venue to pursue personal interests and the loss of spaces to network and make connections to build on in the future (Goldust et al., 2020). In addition, a virtual
conference assumes a level of computer and wi-fi access amongst prospective attendees. A barrier that will vary amongst different demographics and introduce an added inequality (Garcia, Weiss and Engdahl, 2019).

**Tip 6: Use technological solutions to be adaptable in the face of adversity**
In the organisation of a conference, there are many stages where it is necessary to be adaptable. It is a skill in itself to be able to change a plan to an appropriate alternative when required. However, traditionally there has never been a situation that has required the large ideological and practical leap from a planned physical conference to a virtual equivalent. This action became necessary for many conference organisers during the rapid spread of coronavirus across the world in 2020 (Goldust et al., 2020). As a personal anecdote, at the beginning of the pandemic, before guidelines imposing restriction on large gatherings in the UK were in place, my committee were facing a dilemma whether to go ahead with a physical conference, when it could be seen as an inappropriate endorsement of the acceptability of gatherings and whether falling back on the free-choice of our attendees to make the risk assessment for themselves was sufficient for an activity that we were responsible and accountable for. Organising a digital conference required scrapping months of planning, and an uncomfortable speed of new skill acquisition, however, the flexibility of a virtual alternate provided the means to continue to deliver a core component of medical education. The challenges that the coronavirus pandemic has caused have been a catalyst for increased acceptance of teaching over virtual platforms and have paved the way for its continued use and potential integration into medical education post-coronavirus (Koeze and Popper, 2020).

**Tip 7: Find an online platform that supports your vision**
The key step in organising a virtual conference is to find a suitable online platform that can cater to its size and format (Goldust et al., 2020). Current online software varies in functionality and ability to support users; therefore, the choice is very specific to the nature of conference organised. In general, a conference can be enhanced by the use of three key features. Firstly, the appropriate use of chat functions to facilitate anonymised questions, that can be mediated by a host and answered by speakers. Secondly, the use of side rooms, which enable the conference to be split and simultaneous events to occur or smaller discussions encouraged. Thirdly, a method to facilitate speakers’ presentations such as slide share accompanied by a means of attendees viewing the material in their own time preferably over an online accompaniment such as a website or shared drive.

**Tip 8: Tailor your marketing strategy**
As exceptional as a conference’s content and style may be, without a cohesive and comprehensive marketing strategy it is not possible to communicate this message and recruit attendees (Souba, Haluck and Menezes, 2019). The key to marketing is returning to the “avatar attendee” that was envisioned at the conference’s conception. By again visualising the attendee and their actions and behaviours, an appropriate choice of marketing medium and advertisement timing can be formulated. A second important point it to ensure that a marketing plan is done well in advance of the conference date in order to ensure access to targeted mediums and posts at the appropriate times (arke marketing, 2019). A unique advantage of hosting a virtual over a physical conference, is that it naturally lends to advertisement over online platforms as the most effective way of attracting likely attendees.

**Tip 9: Respect your speakers**
A final step before a virtual conference becomes a reality is to appropriately support the speakers who have given their time to present. For many presenting digitally is a novel experience and speaking to an effectively empty room can be disconcerting (Goldust et al., 2020). It is important to trial an online platform before going live and enable each speaker individual time to practise in order to maximise their comfortability and ability to deliver a presentation to their own standards. In successful online presentations, the speaker can be seen at the same time as their slides as this is thought to “humanise” the presentation despite the virtual environment and speakers should also be encouraged to develop new strategies for interactivity with the audience such as through polls and questions.
Tip 10: Engage attendees in their medical education

A core component of medical education is providing opportunities for students to develop their skills. At future stages in the medical career it is necessary to demonstrate experience of research, presenting and engagement in medicine beyond a medical school’s curriculum (Ferrel and Ryan, 2020). Through incorporating opportunities for attendee involvement through poster presentations and spotlight oral presentations, conferences are a multi-faceted means to further medical education, that the advent of coronavirus has threatened (Ferrel and Ryan, 2020). However, virtual conferences can afford students replacement opportunities to present their work. One strategy is to have a session dedicated to quick-fire poster presentations, where speakers summarise their work in a minute and their posters are distributed to the audience to read in their own time.

Tips for delivering a successful conference

Tip 11: Host a successful conference

Hosting any conference requires significant committee organisation and effort on the day, however running a virtual conference has unique challenges (Welch et al., 2010). In order to ensure smooth transitions between speakers and programme events it is of even greater importance to have a Chair with a complete handle on the conference’s logistics. This top-level supervision provides continuity to attendees that will enhance the flow of the conference despite the inherently more disconnected format. As a digital conference is solely dependent on a chosen online platform for its transmission, it is vital to have technological support throughout.

Tip 12: Lastly, evaluate and reflect

The final tip for taking a conference virtual is to collect feedback from your attendees and reflect on the conference as a whole. Online platforms are under-utilised in medical education and in-order to maximise their potential within the field it is essential to optimise according to the requirements of the audience (Welch et al., 2010). In addition, reflection is an essential quality of a doctor and is a skill that needs to be developed throughout an individual’s medical education and career (General Medical Council, 2020). After hosting a conference, it is therefore vital to not only reflect on the performance of the conference, but to also evaluate personal achievements and areas to improve upon.

Take Home Messages

- The coronavirus pandemic has brought to the fore the utility of online platforms in the delivery of components of a medical education.
- The 12 tips detailed in this article provide the tools to plan and execute a virtual conference, that will enable students to continue to learn and develop their skills despite restrictions on interactions and lockdowns on movement.
- In this fluctuating environment, it is more important than ever to adapt to challenges and to continue to persevere.

Notes On Contributors

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Appendices

None.

Declarations

The author has declared that there are no conflicts of interest.

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