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Webinars in orthopaedics and spine surgery – A review on current status and future considerations-will it be a new normal?

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Abstract:

Technological advancements are rapidly changing the face of medical science in terms of knowledge sharing. It therefore becomes essential for medical professionals to remain up to date with recent trends and innovations in the field. Especially in India, this is even truer as the country is striving to foster the development of innovative tools and strategies to improve health outcomes in the country. It is therefore complementary to its other training initiatives to ensure medical professionals have access to avenues to disseminate their research, discuss their work, and network with peers. Continued medical education (CME) in the form of seminars and conferences is a good opportunity for sharing and discussing new insights and networking with peers and can be considered as scientific meetings. CMEs have been the backbone for spreading the knowledge and means to get updated regarding the innovations and treatment strategies. With the growing situation of COVID-19 pandemic that has glorified the need for “Social Distancing,” the idea of conduct of these in-person activities is farfetched. Also with the economy hitting the new low, the prohibitive traveling costs and increased logistics, it is not always feasible to organize and attend numerous regular seminars. In an increasingly interconnected world brought about by technological advancements in communications, other alternatives can be used to supplement the in-person experience. Webinar can serve as an important link for conducting CME in the era of “Social distancing.” Here, we review the webinars in orthopedics and spine surgery – its standard operating procedure and its future directions.

Keywords:

Conferences, COVID-19, orthopedics, spine, webinar

Definition

A webinar (combination of two words i.e., “web” and “seminar”) is a presentation, lecture, or workshop transmitted through the Internet. Webinars can be either transmitted live with the option to interact or viewed at a more suitable moment without the option to interact with other participants or presenters.^[1-3] With today’s available software, it is no longer deemed necessary to have a professional recording studio available. Literally, anyone with access to Internet and a computer with a built-in or external camera can use videoconferencing to give a webinar. Therefore, webinars

are an interesting and cost-attractive way to share knowledge and interact with potentially a very large audience from around the world just at the tip of your fingers. Notably, literature from around the turn of the millennium has already shown that online training can be at least as effective as in-person/classroom-based instruction for cognitive and procedural learning.^[1,4,5]

Standard Operating Procedure

A protocol or standard operating procedure is required not only to guide the process but also to ensure the quality control of the presentation.^[1] A successful webinar session is strongly dependent on the

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planning prior to the session. Fadlelmola *et al.* described 10 commandments organizing a webinar series.^[5]

1. Assemble an effective webinar coordination team
2. Align a webinar theme to the expectations of the audience
3. Consider a webinar planning checklist
4. Share webinar organizational documents
5. Plan early and devise a calendar of regular activities
6. Settle on a convenient and user-friendly webinar platform
7. Select theme expert presenters
8. Announce webinars through mailing lists and social media platform
9. Allocate time for the platform orientation
10. Iteratively assess and evaluate what works and what doesn't.

Webinars are used as platforms to enable knowledge exchange and to disseminate methods, results, and best practices. They are generally aimed at specific audiences and address specific themes. Thus, choosing a webinar presentation requires mapping of the target audience's needs and interests by the presenter. The presenters have to make sure that he involves sufficiently wide range of areas, without being too general. The greater the number of topics covered, the more likely people are to come, but the less time presenter will have to focus on a particular subject matter. Emerging areas can attract greater interest; this can be done with broad and compelling topic areas such as "Emerging Trends in ..." or "New Developments in ..." ^[3,6]

Webinar versus Conferences

Scientific meetings come in various flavors – from 1-day focused workshops of 1–20 people to large-scale multiple-day meetings of 1000 or more delegates, including keynotes, sessions, posters, social events, and so on. Scientific meetings are at the heart of a scientist's professional life since they provide an invaluable opportunity for learning, networking, and exploring new ideas. In addition, meetings should be enjoyable experiences that add exciting breaks to the usual routine in the laboratory.^[3,5,7] There are limitations in organizing these scientific meetings, which can be abbreviated by switching to Webinars. First, it takes a lot of time and agrees to help organize a meeting. Planning time ranges from 9 months to more than a year ahead of the conference, depending on the size of the scientific event, which includes time to select the meeting venue; to call for, review, and accept scientific submissions; to arrange for affordable/discounted hotel rooms; and to book flights and other transportation options to the conference. Having outstanding keynote speakers at the event will also require you to contact them months in advance – the bigger the name, the more time is required.^[6] Webinars

will also require time for planning, but the amount of time required to be devoted for planning is far less compared to conferences. Second, the cost of the conference will be proportional to the capacity of the venue; therefore, a good estimation of the number of attendees will be required to get a good estimate of the costs, which will include costing for meals and coffee breaks together with the actual cost of renting the venue. Apart from these, the audiovisual costs can be additional as well as the cost due to venue staff which in turn will determine how much you need to charge your participants to attend. Webinars will obviate the cost factor to a greater extent, as only electronic platforms are required to conduct a webinar, which can be freely available or by paid subscription. This will decrease the cost incurred from the delegates for attending these scientific events that will encourage global outreach and wider acceptance.^[6,8,9] Third, the workforce involved in organizing the scientific event is mammoth that includes preevent, during the event, and after the event participation by professionals of varied backgrounds and expertise. Webinars will require a limited number of professionals who are involved in organizing the event and are well versed in soft skills. The best part of webinars is the unlimited outreach and possibility of faculty, trainers, and trainee from far across corners of the world, which is otherwise restricted due to resource and time constraints.^[2,3,6,10-13] Fourth, unfamiliarity of the event venue can create nervousness among the presenters, especially the young presenters, and can create problems during last moment emergencies. Webinars provide presenters as well as participants the convenience of attending an academic presentation from the comfort of their offices or homes while multitasking.^[6] Another advantage unique to webinars is the capability for recording the lecture and listening to it later on with no additional cost involved and since the lectures can be held during the routine didactic time duty hour violations can be avoided.^[12,14,15]

Webinars probably soon in coming times replace conventional forms of education and communication. The way conferences will be held in the near future will have to be relooked into considering the advantages of videoconferencing, which surely cannot be neglected while organizing meetings of large scale requiring resources which cannot be justified in the era of social distancing, which is bound to stay longer than one can think of.^[3,11,14,16-19]

Webinar and Training

Webinars present a great virtual opportunity to engage and stimulate interactions between presenters and participants and can accommodate more participants than a physical conference room setting, which could be limited by space and accessibility.^[10] A pilot study

by Grover *et al.* showed that “live webcast” was as good as the classroom lecture, if not superior to it in certain aspects. The involvement of postgraduate students and postdocs as part of the webinar coordination team facilitates the development of their skills in planning, communication, use of various conferencing platforms, coordinating, and hosting of scientific events. These soft skills are vital for collaboration and working in large consortia, which are not usually part of their normal training.^[5,8,14]

Continued medical educations (CMEs) with medical conferences utilizing various modes of teaching such as didactic lectures, key opinion notes by subject matter experts, focused group discussions, dedicated symposium, and conventional teaching of students are all possible through webinars.^[3,5,19]

Webinars with its global outreach can be used for training, exchanging ideas and develop relationship especially in remote lower countries like the hand surgery organizations American Association for Surgery of the Hand and American Society for Surgery of the Hand are collaborating with Kumasi hand surgeons, therapists, and Health Volunteers Overseas to exchange knowledge through videoconferencing.^[19]

Webinar in COVID Scenario

COVID-19 pandemic caused by severe acute respiratory syndrome coronavirus has led the world to come to a standstill, slackening the functioning of one and all, and bringing upon a halt upon the chain of necessities and resource. In this new era of the pandemic, social distancing has been the new normal, which has led to the conduct of conventional meetings, training, seminars, and educational opportunities a dream farfetched.^[20] To add to the misery on and off lockdown measures in most countries, triage of resources and workforce including trainers, redeployment of duties, and overwhelming need of social distancing has demanded a need for new normal of training, teaching, and CME. Videoconferencing, Internet-based webinars, and training opportunities have been the savior in these pressing times and a boon to meetings and training. With webinars, dissemination of knowledge has never been so effective and is growing by leaps and bounds to cater the mounting needs during times of lockdown.^[4,13,17,18] With the advent of online technology and web platforms, webinars have always been existing in corporate and business world to cater the need of urgent meetings for sudden decision-making, a quick review of unplanned situations, and as a planned measure on short notice. Webinars have lately emerged not only as a primary mode of communication but also as one of the strongest tools in training, teaching, and learning on a worldwide scale. Webinars have not

only been of great impact in establishing and restoring connection and communication at the individual level or institutional level but also on the global level, making the reach and connect far bigger than what was thought ever. Extended lockdown days have led to evolution of newer avenues, which remained unexplored till date in the field of CMES/training/communication.^[3,8,11,12,16]

Recommendation

The webinars series should form part of the regular activities of any scientific consortium that aims to strengthen research activities and foster collaborations among the different partners at national and international levels. It may also open avenues for collaboration or spring new research directions. The benefits of webinars are plenty and with passing days, newer benefits are being highlighted with human intelligence exploring the opportunities and possibilities, utilizing various features of videoconferencing. With the changing scenarios in COVID times where the new normal of social distancing is of paramount importance, “Webinars are here to stay.”

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Conflicts of interest

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