Green it! Planning more sustainable conferences

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Abstract
Climate change and the COVID-19 pandemic challenge us to re-evaluate the way we live and work. In the academic sector, this includes organising and attending conferences and other scientific meetings. The pandemic has led EAHIL 2020 to be moved online, which is "greener" than physical meetings, but has interactional drawbacks. On the other hand, planning of physical conferences can make use of existing guidance to improve the environmental impact in areas such as venue and travel arrangements, catering, waste reduction as well as communication. In the future, conference organisers can draw upon insights into remote and virtual collaboration gained during the pandemic. Hybrid conferences that allow physical and remote attendance might become an option for increased sustainability of scientific meetings.

Key words: *congresses as topic; conservation of natural resources; climate change; videoconferencing.*

Introduction

Climate change has led to an increased awareness of the environmental impact of our lifestyle, not only in our private lives but also in our work context. Part of our work as health librarians, biomedical information professionals, and researchers consists in attending national and international conferences and workshops to exchange ideas and knowledge, build networks and collaborate with colleagues. But organising and attending such events has a considerable environmental impact (1), leading many of us to ask if there is a way to make them "greener". The following essay offers potential considerations about guidance for planning more sustainable conferences and the impact the COVID-19 pandemic might have on future conference planning going forward. It invites us to rethink our current practice and consider new possible avenues of communicating, meeting and networking.

Step 0: is a physical event necessary?

The European Commission's seven step guideline on organising sustainable meetings and events has a preliminary "step 0" (2). It challenges guideline users to consider whether a physical meeting is even necessary. In a year marked by the COVID-19 pandemic, organisers of many academic conferences answered this question with "yes" and decided to cancel or postpone conferences planned for 2020. The organisers of EAHIL 2020 took the opposite approach and moved the conference into the online space. We can consider this a success. Not only in terms of maintaining the possibility of academic exchange during the pandemic, but also in terms of achieving environmental sustainability goals. A virtual event removes the majority of ecological concerns associated with academic conferences, in particular travel-related greenhouse gas emissions due to aviation.

But what about the benefits of physical meetings? Janisch *et al.* (3) note: "Technology cannot fully replace the power of direct interaction". While virtual events can serve as an enhancement to academic exchange, they have a hard time replacing real life personal interaction and networking, in particular for those conference attendees who are not yet well connected in their field. According to Janisch *et al.* (3) online interaction and collaboration works best between people who already know each other personally. This indicates that attendees of online conferences who do

not have an already well established professional network, might profit less from the important social aspects of the event.

Guidance for sustainable conference organisation

If we do not want to completely abandon physical conferences in the future, and at the same time intend to face the challenges posed by the climate crisis, we need to consider ways to lessen the negative environmental impact of such events. But where to start? Planning and organising events like the EAHIL workshops and conferences is already a complex undertaking. Trying to figure out how to improve environmental sustainability at the same time seems quite daunting. Fortunately, there is no need to reinvent the wheel. A number of international (2, 4) and national organisations (5) as well as universities (6,

7) provide guidelines and checklists for "green" events. There is even an international standard for sustainable events: ISO 20121 (8).

Areas for improvement

While the focus of various guidance documents can differ, the general gist of the recommendations tends to go in the same direction. Main areas for consideration are: venue and travel arrangements, catering, waste reduction, recycling, and communication. The following considerations are summarised from a selection of available guidance (2, 4-7) to show the scope of areas with potential for adaptation in form of sustainable event management. Table 1 gives an overview of the guidance used in this summary. Note that this is not an exhaustive list of guides, checklists, and recommendations on the topic.

Title	Year	Issuing organisation
Guidelines on organising sustainable meetings nd events at the Commission (2)	2018	European Commission
Planning healthy and sustainable meetings (4)	2018	World Health Organization
Guidelines for the sustainable organisation of events (5)	2015	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), Germany
Sustainable event certification (6)	2017	North Carolina State University, USA
Sustainable event guide (7)	2018	University of Exeter, UK

Table 1. *Examples of guidance for sustainable event and conference organisation.*

Since air travel is the main factor for the environmental impact of conferences (9), it is important to choose a venue that can also be reached by other means of transport and to communicate and promote these alternative travel options. Additionally, carbon offsetting of inevitable travel-related greenhouse gas emissions could be recommended to attendees or even budgeted into conference fees by the organisers. The energy efficiency of the chosen venue as well as the waste collection and recycling system in place should also be taken into consideration.

In addition, catering is an area where sustainability measures can be taken to reduce environmental impact. Recommendations call for seasonal and locally produced food and beverages, ideally choosing organic and fair trade products whenever possible. If the water quality allows it, tap water should replace bottled water. Food should be predominantly plant-based, as meat, dairy, and fish contribute more heavily to greenhouse gas emissions (9, 10).

Catering also relates to another area, waste management. Reusable crockery, glassware and cutlery

reduce the amount of waste produced, as does reducing paper use, for example by providing handouts and brochures digitally. Correct waste sorting can be improved by providing clearly labelled recycling and non-recycling bins.

However, the success of any sustainability measure depends on proper administration and communication. For this reason, is it important to nominate a sustainability coordinator, and to communicate the conference's sustainability measures not just to the attendees, but to everyone working on and sponsoring the event.

Finally, it is worth remembering that today's understanding of sustainability exceeds environmental goals. The United Nations Sustainable Development Goals (11), which form the foundation of the International Advocacy Programme launched by the International Federation of Library Associations and Institutions (12), also incorporate social, health and economic topics. These broader goals can also be part of sustainable conference organisation, in particular since they are often linked closely to environmental concerns. Interestingly, this is the area where different guidance documents diverge most. Depending on the focus of the organisation issuing the guidance, they might call for providing healthy food options and encouraging physical activity (4), taking into account the needs of disabled people and the principles of gender mainstreaming (5), or making sure to contract socially responsible companies (6). Whereas the recommendations centred more directly on environmental concerns are independent of the conference's goals, the broader social, health and economic considerations should be shaped by who is organising the event.

Planning for the post-pandemic period

All of the guidance discussed above has been published before the COVID-19 pandemic, which raises the question: is there anything we can learn from the current situation that will have an impact on future conference organisation?

The Cercedilla Manifesto, published in April 2020 (10, 13) calls for more sustainable research meetings. Although it is based on years of previous research and discussion, its initial considerations seem prescient. The first guiding question is one we are already familiar with: "Is a physical meeting necessary?" However, instead of implying a binary choice, this is followed up

with "Are logistics for remote participation available?". The authors argue that hybrid formats that allow for physical and online participation, not only reduce travel-related emissions but also are more inclusive for participants with limited financial or time resources (and make it possible to reduce travel-related health risks).

The technological and administrative requirements to achieve such a hybrid format might have seemed daunting a year ago. Yet, during the pandemic, universities and other institutions had to adapt not only to distance teaching and remote work, but also to hybrid formats of collaboration. Many invested not only in videoconferencing software, but also improved technical equipment for meeting rooms and lecture halls. At the same time, the proliferation of online conferences like EAHIL 2020 provides us with first-hand experience of the comparative advantages and disadvantages of virtual and real life events.

When organising scientific conferences in the future, we should draw upon this improved technological expertise and understanding of what we expect from physical compared to remote meetings. In this context, hybrid formats seem particularly promising, both as a sustainability measure that decreases travel-related greenhouse gas emissions, and as a way to deliberately combine the advantages of virtual conferences with those of physical meetings.

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