Technology and Simulation Center (MTS) and the operating theatre, providing an in situ operating theatre simulation track using an advanced medical simulator. Equipment workshops were held in the MTS. Problem-based learning was held in conference rooms and ultrasound (regional and point-of-care tracks) in the admission area and in conference rooms. Abstracts were presented using the hybrid format through inperson attendance or virtually.

The ISA conferences are strongly supported by the industry. As it became clear that in-person interaction with the industry was impossible, our supporters nimbly switched to an online platform. We offered promotional opportunities, including a digital magazine published before the conference. This allowed the industry to present videos and podcasts of their advances and technology. In addition, during the streaming of the hybrid conference, a viewing channel offered industry-sponsored content, with links to video on demand and chat with company representatives. We achieved industry support that was only 17% lower than the level achieved in the 2019 in-person conference.

Amongst the 800 Israeli anaesthetists, more than 500 attended, plus 78 industry delegates. Considering the hybrid format, this compares well with in-person attendee numbers for 2018 and 2019: 559 (2018) and 638 (2019) for the scientific programme, and 196 (2018) and 275 (2019) for the workshops.

In conclusion, our colleagues supported the communal learning platform, reflected by registration that exceeded our expectations. The hybrid format satisfied our guiding principles, enabling a community experience, with a broad highquality scientific programme, well-attended workshops, and substantial support from our industry partners who were extremely satisfied with their visibility and interaction with

the attendees. As many attendees shared, 'we really missed

### **Declarations of interest**

The authors declare that they have no conflicts of interest.

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## Effects of the COVID-19 pandemic on environmental sustainability in anaesthesia. Comment on Br J Anaesth 2020; 125: 680-92

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Keywords: COVID-19; environmental impact; general anaesthesia; life-cycle assessment; regional anaesthesia; resource management

Editor-The timely and comprehensive review of the environmental impacts of anaesthesia by McGain and colleagues<sup>1</sup> highlights the urgency of the changes that need to be made, both by individual practitioners and by the profession worldwide. The authors are correct in stressing the need for further research into life-cycle assessment and for innovation in waste and resource management. But, might the coronavirus disease 2019 (COVID-19) pandemic affect

this important transition towards a carbon-neutral profession?

For example, understandable concerns about nosocomial COVID-19 transmission have resulted in significant per-case increases in plastic use and incineration and decreases in non-plastic recycling. These are in line with non-medical national and international trends,2 and are often sanctioned by governments, but could be reversible

with better evidence, education, and advocacy. Furthermore, although surgical activity has declined during the pandemic, there is likely to be a rebound increase in resource use and waste as the backlog of elective surgical cases is addressed.

Conversely, other trends could well improve environmental sustainability in anaesthesia. Several authors have advocated the clinical, financial, and environmental benefits of regional anaesthesia over general anaesthesia during the pandemic and into the future,<sup>3,4</sup> and there is evidence that practice is already changing in this direction (e.g. in hip fracture repair).3-6 Similarly, greater familiarity with use of i.v. infusions of sedatives and opioids during secondment to critical care could yield environmental benefits if clinicians go on to administer total i.v. anaesthesia more commonly.

Innovating more widely, the pandemic might stimulate, for example, multidisciplinary reconsideration around the use of finite healthcare resources (e.g. by rationalising preoperative investigations)<sup>7</sup>; wider use of telemedicine (e.g. in assessment and follow-up clinics); closer engagement with colleagues in infection control when designing single-use equipment, packaging, and infection protocols; development of online education resources; and partnership with industry.8 All of these aim to minimise travel and optimise resource management, whilst maintaining or improving the quality of patient care and experience.

COVID-19 is an ongoing global disaster, but tragedy can lead to innovation and opportunity. Internationally, anaesthetists need to engage urgently and comprehensively in a consensus environmental research and implementation agendum. With this in mind, is the current 'anthropopause' likely to have a positive or a negative effect on environmental processes and behaviours in anaesthesia? And what are the most important opportunities for advancing environmentally sustainable healthcare arising from the COVID-19 pandemic? These are not only questions for the authors, but priorities for the profession to address as we emerge from COVID-19.

### **Declarations of interest**

The authors declare that they have no conflicts of interest.

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doi: 10.1016/j.bja.2020.12.003

Advance Access Publication Date: 5 December 2020

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# Effects of the COVID-19 pandemic on environmental sustainability in anaesthesia. Response to Br J Anaesth 2021;126:e118-e119

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