EDITORIAL

Impact of the COVID-19 pandemic: The perceptions of health professions educators [version 2]

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Abstract
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What are health professions educators doing during the COVID-19 pandemic? A search of articles in MedEdPublish on the topics of COVID-19 revealed 39 articles published in the first 3 months of the pandemic. Topics included curriculum adaptation, guidelines for using technology, assessment adaptation, impact on students, faculty and career development, and conference adaptation. There was significant overlap among articles, particularly those discussing teaching, learning, and assessment practices. Common themes were adaptation, innovation, remote delivery, flexibility in the face of a pandemic, and how to continue to educate and graduate competent health professionals. All articles were descriptive, and none included data describing efficacy, likely due to the short timeline since the pandemic's inception. Additional study is necessary to produce evidence for the teaching and assessment adaptations described. Some changes are likely to persist longer-term and may outlast the pandemic itself.

Keywords
Medical education, COVID-19, pandemic, innovation, learning technology

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Background

The COVID-19 pandemic is a major event that has disrupted almost all aspects of life since January 2020. Health professions education is no exception, because it operates within the healthcare system, universities, and the broader community. Health care has had to switch rapidly to focus on both public health prevention strategies and the acute care of patients with serious COVID-19 infections. Education providers, like all sectors of society, have been subject to community-wide strategies introduced to limit the spread of disease. Additional personal hygiene requirements, social distancing, and restrictions on mobility and travel have resulted in community ‘lockdown’. With fewer patients, clinical teachers, students and professional staff at teaching campuses, all teaching, learning and assessment activities are affected. On-line content delivery has increased, clinical placements have been suspended or altered and assessment practices have had to change.

One additional change evident to editors of medical education journals is that academics seem to have had more time to write about their experiences. This journal has received substantially more manuscripts than normal. About 5 months into the pandemic, we have published 38 papers with either ‘COVID-19’ or ‘pandemic’ in the title or as the main subject. Contributions have come from a wide range of participants, including those in leadership roles, teachers, examiners and learners, and from many nations. MedEdPublish may be particularly suited to provide a window on what is current, because the journal has a relatively rapid publication cycle and publishes all manuscripts that meet ethical and formatting standards (about 90% of all submissions), allowing the community of practice to decide their value (Hays, 2016). We prioritised the processing of these papers because of the high level of interest in ways of responding to the major disruption. The result is a compilation of early papers that describe how health professions educators managed through the initial stages of this evolving crisis, allowing a synthesis to be made of responses to the disruption. Here we provide a brief summary of strategies reported around the world.

Method

A search for articles on the MedEdPublish website was conducted using ‘COVID-19’ and ‘pandemic’ as the primary search terms in the fields of ‘title’. The date of the final search was 30th June, almost exactly 3 months after the first COVID-19 article was published on 23rd March. While the closing date is arbitrary, the period spans the initial outbreak of the pandemic and the rapid responses to the global disruption. A simple descriptive analysis was conducted to categorise articles by type and broad topic content, focusing on strategies for adapting to challenges, rather than simply describing them. All of the articles were set primarily in medical programs, with five including an interprofessional viewpoint across health professions’ education programs. Each paper was subjected to a ‘light touch’ thematic analysis to understand the common topics discussed in the health professions education community as the pandemic unfolded.

Results

The 38 articles were spread across categories - ‘Personal view or opinion piece’ (15), ‘Practical tips and/or guidelines’ (13), ‘New educational method or tool’ (6), ‘Letter’ (2) and ‘Case study’ (2). None were research papers, probably reflecting the short time frame from action to publication. Many articles covered more than one topic, particularly the more general overview articles. For example, the use of technology was commonly mentioned in adapting most teaching, learning and assessment activities. The most common topics were the use of technology (28), curriculum or assessment adaptation (26), impact on undergraduate and postgraduate teaching (17), faculty and/or career development (7) and conference adaptation (3). The summary data for the articles and letters are presented in Table 1.

There were examples from several schools in different countries that documented how faculty responded quickly and successfully to adapt to the rapidly evolving situation. Approaches were similar, and there has not yet been sufficient time for institutions to evaluate the impact of their interventions. The key to success appeared to be leadership and communication involving all stakeholders (Samarasekera et al., 2020). Lectures are now online, the use of simulation has increased and strategies for reducing the mixing of patients, students and staff for teaching and assessment are being developed. A common view is that health professions’ education will continue to use these strategies, at least to a substantial extent, even after ‘stability’ returns.

Technology use. Several articles addressed the need to scale up technology use, both using existing software and developing new software. Challenges for lower income countries were acknowledged (Cecilio-Fernandes et al., 2020), and the differential access to infrastructure between nations was explored. Faculty and students’ access to and proficiency with technology was also noted as being heterogenous. Authors provided practical tips about the use of blended learning with the right balance of synchronous and asynchronous online learning and teaching (Eeachempati et al., 2020; Sanders et al., 2020).

Curriculum adaptation. Various degrees of blended learning, with some reliance on virtual learning environments, are now widespread and have probably allowed programs to continue, albeit quite differently. Almost all articles referred to
| Type of MEP Manuscript | First Author & Location of Authors | Title of Article | Themes Discussed |
|------------------------|-----------------------------------|------------------|------------------|
|                         |                                    |                  | TEL  | Curriculum/ Assessment Adaptation | Impact on UGT & PGT | Faculty Support & Career Development | Conferences & Scholarly Activity |
| Personal View or Opinion Piece | Alexander, UK                      | All hands on deck: early graduation of senior medical students in the COVID-19 pandemic | X    | X                              |                     |                               |                               |
|                         | Alrefaie, Egypt & Saudi Arabia     | Monitoring Online Learning During COVID-19 Pandemic; Suggested Online Learning Portfolio (COVID-19 OLP) | X    | X                              |                     |                               |                               |
|                         | Arandjelovic, Australia            | COVID-19: Considerations for Medical Education during a Pandemic | X    | X                              |                     |                               |                               |
|                         | Cecilio-Fernandes, Brazil & UK     | The COVID-19 pandemic and the challenge of using technology for medical education in low and middle income countries | X    | X                              |                     |                               | X                              |
|                         | Dyer, Barbados                     | Intimate Partner Violence: Using Standardized Patients to Improve Trauma-Informed Care in the era of the Covid-19 Pandemic | X    | X                              |                     |                               |                               |
|                         | Fernandez-Altuna, Mexico           | Experience of the biggest Med School in Mexico during the COVID-19 pandemic | X    | X                              |                     |                               |                                 |
|                         | Goh, Singapore & UK                | A vision of the use of technology in medical education after the COVID-19 pandemic | X    | X                              |                     |                               |                                 |
|                         | Goh, Singapore & UK                | Rethinking scholarship in medical education during the era of the COVID-19 pandemic | X    | X                              |                     |                               |                                 |
|                         | Hamad, Saudi Arabia                | "To teach is to learn twice" Added value of peer learning among medical students during COVID-19 Pandemic | X    | X                              |                     |                               | X                              |
|                         | Iwai, US                           | Transition to Virtual Reflection: Narrative Medicine during COVID-19 | X    | X                              |                     |                               |                                 |
|                         | Johnson, US                        | Residents’ Perspectives on Graduate Medical Education during the COVID-19 Pandemic and Beyond | X    | X                              |                     |                               | X                              |
|                         | Margolis, US & Uruguay             | The Extended Congress: Reimagining scientific meetings after the COVID-19 pandemic | X    | X                              |                     |                               |                                 |
|                         | McKimm, UK & Australia             | Health Professions’ Educators’ Adaptation to Rapidly Changing Circumstances: The Ottawa 2020 Conference Experience | X    | X                              |                     |                               | X                              |
| Type of MEP Manuscript | First Author & Location of Authors | Title of Article                                                                 | Themes Discussed |
|------------------------|-----------------------------------|----------------------------------------------------------------------------------|-----------------|
|                         |                                    |                                                                                 | TEL | Curriculum/Assessment Adaptation | Impact on UGT & PGT | Faculty Support & Career Development | Conferences & Scholarly Activity |
| Practical tips and/or guidelines | Sabzwari, Pakistan                | Rethinking Assessment in Medical Education in the time of COVID-19               |     | X                              | X                  |                                 | X                            |
|                         | Woywodt, UK                       | COVID-19 - the ultimate disruptor?                                              |     | X                              | X                  |                                 | X                            |
|                         | Eachempati, Malaysia & India      | Ten maxims for out of class learning to outclass the academic challenges of COVID-19 |     | X                              |                    |                                 | X                            |
|                         | Fawns, UK                        | Challenging assumptions about “moving online” in response to COVID-19, and some practical advice |     | X                              |                    | X                               | X                            |
|                         | Foulds, Canada                   | From Spark to Flame -- Radical Innovations from Cataclysmic Events in Medical Education |     | X                              |                    | X                               | X                            |
|                         | Kachra, Canada                   | Practical tips for faculty development workforce training under pressure in the time of COVID-19 pandemic    |     | X                              |                    |                                 | X                            |
|                         | Neufeld, Canada                  | Twelve tips to combat ill-being during the COVID-19 pandemic: A guide for health professionals & educators |     | X                              |                    |                                 | X                            |
|                         | Raja, UK                         | How to utilise your time effectively during the Covid-19 pandemic                |     | X                              |                    |                                 | X                            |
|                         | Reyna, New Zealand               | Twelve Tips for COVID-19 friendly learning design in medical education          |     | X                              |                    |                                 | X                            |
|                         | Samarasekera, Singapore          | Response and Lessons Learnt Managing the COVID-19 Crisis by School of Medicine, National University of Singapore |     | X                              |                    |                                 | X                            |
|                         | Sanders, UK, the Netherlands, Singapore, Germany, Oman, US, Canada, and Australia | Twelve tips for rapidly migrating to online learning during the COVID-19 pandemic |     | X                              |                    |                                 | X                            |
|                         | Taha, UAE & Saudi Arabia         | Curriculum delivery in Medical Education during an emergency: A guide based on the responses to the COVID-19 pandemic |     | X                              |                    |                                 | X                            |
|                         | Taylor, UAE & UK                 | Transformation to learning from a distance                                       |     | X                              |                    |                                 | X                            |
| Type of MEP Manuscript | First Author & Location of Authors | Title of Article | Themes Discussed |
|------------------------|-----------------------------------|------------------|-----------------|
|                        |                                    |                  | TEL | Curriculum/ Assessment Adaptation | Impact on UGT & PGT | Faculty Support & Career Development | Conferences & Scholarly Activity |
|                        | Wadi, Saudi Arabia & UAE           | The assessment clock: A model to prioritize the principles of the utility of assessment formula in emergency situations, such as the COVID-19 pandemic |     | X                            |                      |                             |                                |
|                        | Wong, Singapore                    | Redesigning team-based learning facilitation for an online platform to deliver preclinical curriculum: A response to the COVID19 pandemic | X    | X                            |                      |                             |                                |
| **New education method or tool** | Blythe, UK                          | Online Graduation of Doctors During the COVID-19 Pandemic |     | X                            |                      |                             |                                |
|                        | Khan, UK                            | An adaptation of Peyton's 4-stage approach to deliver clinical skills teaching remotely | X    | X                            |                      |                             |                                |
|                        | Mendes Chiloff, Brazil              | Volunteering in medical school during the pandemic: a solution for teaching | X    | X                            |                      |                             |                                |
|                        | Posner, Canada & US                 | Virtual reality videos for training and protocol dissemination during a pandemic | X    | X                            |                      |                             |                                |
|                        | Sa-Couto, Portugal                  | How to use telesimulation to reduce COVID-19 training challenges: A recipe with free online tools and a bit of imagination | X    | X                            |                      |                             |                                |
|                        | Sudhir, Dubai                       | Adapting to the need of the hour: Communication skills simulation session using an online platform during COVID-19 | X    | X                            |                      |                             |                                |
| **Case Study**         | Boursicot, Singapore & Australia    | Conducting a high-stakes OSCE in a COVID-19 environment |     | X                            |                      |                             |                                |
|                        | Veasuvalingam, Malaysia             | Falling back on technology mindfully during COVID-19 pandemic: NUMed campus experience |     | X                            |                      |                             |                                |
| **Letter**             | Niburski, Canada                    | A corona virus tracker for clinicians and students: Assessing education during an evolving phenomenon |     |                              |                      |                             | X                              |
|                        | Shimizu, Japan                      | More than adaptation: why we carried out faculty development on assessment in the middle of a pandemic |     |                              |                      |                             | X                              |

MEP=MedEdPublish, TEL=Technology Enhanced Learning, UGT=undergraduate teaching and training, PGT=postgraduate teaching and training
students having to rely more on online learning methods, which was more socially isolating. This seems to be more straightforward for more didactic methods, as lectures are relatively easy to broadcast and team-based learning can take place in online ‘rooms’ (Wong et al., 2020). Clinical teaching is much harder to adapt due to safety and narrower clinical workload. Placements were cancelled or deferred, except in some cases for more senior students, so innovation became essential. One interesting innovation is the use of simulated patients for communication skills teaching via live streaming (Sudhir et al., 2020). Virtual reality methods, where technology was available, were thought to be a potential growth area as part of a broader vision to extend the use of technology in medical education (Goh and Sandars, 2020:2).

Assessment adaptation. Arguably, assessment, particularly clinical assessment, has suffered the greatest impact. While there were only four papers on adapting assessment, common themes emerged. The strongest message is that the forced change in assessment practices is an opportunity to improve assessment practice into the future. Assessment may become more programmatic, more reliant on many more methods and assessment events, and less reliant on large, high-stakes events (Wadi et al., 2020; Sabzwari, 2020). The recording and monitoring of assessment may become more important, with more sophisticated technology to support e-portfolios (Alrafiae et al., 2020). While OSCEs can be modified to improve safety (Boursicot et al., 2020), will they continue at all, given the potentially high risks of transmission at crowded examination centres where patients, students and examiners from many places are thrown together?

Faculty/career development. Two more attributes seem to have been added to the list of desirable attributes for faculty members. One is a much deeper expertise in education methods, particularly those required to support remote teaching, learning and assessment (Kachra and Ma, 2020). The unrealistic expectation that teachers can be rapidly pushed online without support and training was explored by Fawns et al., 2020. The other is flexibility and a capacity to change education strategies rapidly (Shimizu et al., 2020). How to achieve this on a large scale is not addressed, although specific training in technology and managing disruption may become more frequent. The impact of surrounding community supports, such as childcare arrangements, public transport and the potential to maintain working from home are likely to remain prominent issues.

Impact on learners. Students at one school created an App that tracked rapidly changing information on COVID-19 to both increase knowledge about and protect them from the disease (Niburski and Niburski, 2020). Similar software was developed in many nations for both the professions and the general public. Postgraduate specialty trainees reported that the narrowing of clinical workload may have had a greater effect on their training because some services closed and clinical staff were re-directed (Johnson and Blitzer, 2020). The outcome may be a delay in completion in several specialty programs. There was also a report of volunteering of undergraduate students (and faculty) to assist in managing the heavy workloads (Mendes et al., 2020), and one of early graduation of final year students to support the workforce (Alexander et al., 2020). The ‘rite of passage’ of graduation ceremonies was maintained through live streaming (Blyth et al., 2020).

Conference adaptation. One article reported the rapid adaptation that had to be made with little warning to the Ottawa 2020 conference that was held at the beginning of March, just as the pandemic was taking hold outside of China (McKimm et al., 2020). Only about 30% of registrants could attend, and social distancing was encouraged. Plenaries and workshops switched to online presentations with international live streaming of questions and discussion. This appeared to work well, particularly for plenaries and some workshops that were discussion based rather than ‘hands-on’ practical in nature. The heroes were the IT team and participants who connected at very unfriendly hours. Another paper reported the conversion to online methods for an international conference held at the end of March, when the pandemic had progressed further. There were several hundred registrants in 20 countries and the most likely outcome was cancellation. Instead, organisers spread sessions over 4-8 weeks to allow for engagement through local and technology-mediated discussions while registrants continued to work (Margolis et al., 2020). These blended conference delivery approaches may become part of all future conferences.

Discussion
What has emerged from this experience of the most severe global disruption in about 80 years (the second World War may have been a similar scale) may best be described as shared experiences and similar responses, with some genuine innovations and a need for further educational development, evaluation and research. What lessons can be learned? Some changes to health care and health professions education may remain for some time, perhaps becoming permanent. Further global disruptions, although rare in terms of human lifespans, are likely at some stage. Other, less severe disruptions may be more common. Telehealth and telehealth professional education may become more common and important.

As interesting as this collection of papers is, we are left with a series of questions that need to be answered for the community of practice to thrive. Should all lectures be recorded without audiences and be available as podcasts and videos? Will some students demand seated classes as part of their educational experience? Will medical educators.
embrace the tools in their virtual learning environments to enhance the design and effectiveness of their online lessons? How sustainable are large, high stakes written and clinical examinations? Should we move to more frequent, smaller assessment activities of greater breadth? Although simulation and virtual reality will develop further, how can immersion in real health care be maintained? How can we remain in a state of preparedness and ability to respond rapidly to future disruptions? How will faculty development evolve? Will working patterns remain more flexible and, if so, how will this affect career development? Will large international conferences survive? How will professional networks develop and thrive if ‘corridor’ conversations and debates over tea or coffee cannot take place? An issue that pervades most of these questions is: what is the value of social interaction in medical education?

These questions form a substantial agenda for research and debate as health professions’ education evolves. A quote from the business literature is apposite:

'Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world' (Barker, 1993).

Limitations
This is a limited review of papers submitted to only one health professions education journal. All are self-report articles with no data or evaluation to guide judgments of effectiveness. The article therefore represents the thinking and responses formed on the run during a major global disruption, not a definitive review of how best to respond.

Conclusion
Health professions educators had to respond quickly to the re-focusing of health care and healthcare staff to a narrower clinical caseload with tight infection control measures in highly stressed health care systems. The surrounding, community-wide measures such as enhanced personal hygiene measures, social distancing and travel restrictions, made campus attendance almost impossible. Programs switched rapidly to online methods where the technology was available. Clinical learning was cancelled or deferred, and where possible replaced by simulation, with the assistance of virtual reality. Learning and assessment were disrupted, most severely for those nearing graduation and in postgraduate specialty training. Amidst this turmoil, some interesting innovations have emerged. There is need for evaluation and research to produce evidence that guides the adoption of innovation in future teaching, learning and assessment practices. The recent disruption is an opportunity to improve health profession education beyond the duration of the pandemic. This article has focused on questions that need answers, so the focus should now be on evaluation of adaptation strategies.

Take Home Messages
- Health professions’ education had to respond quickly to the rapidly unfolding COVID-19 pandemic
- Normal business was not possible
- Globally, responses appear to be similar
- The disruption has resulted in innovations that need evaluation
- Some of the changes are likely to persist as better ways are found

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Reference Source

Reference Source
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Migrated Content

Version 2

Reviewer Report 05 December 2020

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Megan Anakin
University of Otago

This review has been migrated. The reviewer awarded 4 stars out of 5

Thank you for inviting me to review the revised version of this article. Thank you for reorganising the first two sections of the article. The warrant for the article is now well-established. I am looking forward to a follow up article that examines further COVID-19 articles submitted to our journal. One new issue to bring to your attention is a minor error. In the abstract, you state 39 articles were sampled, however, in the methods and results only 38 articles are presented. In your reply, please let the reader know if this number is correct or not. Perhaps this error arose during the revision of this article. In the first version of the article, there is an article by Lee, How we taught medical students in a tertiary hospital during a pandemic present in the results but missing from the reference list and it is entirely omitted in the second version of this article.

Competing Interests: No conflicts of interest were disclosed.

Reviewer Report 15 October 2020

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Süleyman Yildiz

This review has been migrated. The reviewer awarded 5 stars out of 5
I liked very much this article. Thanks for great summary of 39 articles about covid impact. The article is very well written with a good English. It provides excellent summary points with detailed tables and collection of references of medical education experiences during the COVID-19 pandemic in medical education. Conclusion part arises new questions and directs the readers to new researches. For example, the situation of medical education specifically poses an additional challenge during the pandemic, as this is a curriculum that is greatly based on clinical practice in many faculties. The question arises in my mind to what degree this situation affected medical students in clinical training as future physicians, as essential components of practical knowledge will not be available to learn via distance learning. Thanks for great job!

**Competing Interests:** No conflicts of interest were disclosed.

**Reviewer Report**
07 October 2020

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**Judy McKimm**
Swansea University

This review has been migrated. The reviewer awarded 4 stars out of 5

This article is a really helpful review of a series of rapidly published articles during the three months when the pandemic was taking hold across the world and impacting on all aspects of HPEs life. The authors provide a good summary of both the articles cited as well as the key findings from the literature. I recommend this article, not just as a summary of what has happened, but in providing a road map for what HPEs will have to cope with in the foreseeable future. It is salutory that already some of the predictions in the paper have come to fruition such as virtual teaching and conferences, but it also reflects the inherent flexibility and adaptability of our community.

**Competing Interests:** No conflicts of interest were disclosed.

**Version 1**

Reviewer Report 03 October 2020

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Shaoting Feng
The First Affiliated Hospital of Sun Yat-sen University

This review has been migrated. The reviewer awarded 4 stars out of 5

It is quite an interesting study on the perceptions of health professions educators.

Competing Interests: No conflicts of interest were disclosed.

Reviewer Report 23 July 2020
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Annwyne Houldsworth
HECL

This review has been migrated. The reviewer awarded 4 stars out of 5

Thank you very much for this timely article. This paper is extremely well written with a very high standard of English language. The paper provides a very valuable table with a collection of references of medical education experiences during the COVID-19 pandemic in medical education. The main themes of common findings that arise in the reference papers are well defined and described, giving an insight into some of the issues that have arisen during the pandemic crisis. There are a number of questions arise in the conclusion that could inform other medical educationalist researchers to initiate new investigations, researching into the future of medical education, including the evaluation of student experiences. Readers who are interested in viewing different medical education experiences and alternative methods of delivery will be able to search the table of references in this publication as a useful repository to seek new ideas. A small selection of examples of individual experience to highlight some of the generalized themes would be interesting to read. The addition of some educational theory background into curriculum design, assessment and the use of technology in medical education would have given a better contextual introduction to the paper. A table of the examples of technology and software used by the reference papers would be an extremely helpful addition to the paper. An example that highlights the most interesting practical tips that the author appreciated would be most appreciated. A description of a small sample of suggestions and examples of assessment methods that aim to improve or innovate the
student assessment, found in the papers referenced, would have been an edifying and helpful addition.

**Competing Interests:** No conflicts of interest were disclosed.

**Reviewer Report 16 July 2020**

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Jessica Servey  
Uniformed Services University of the Health Sciences F. Edward Hebert School of Medicine

This review has been migrated. The reviewer awarded 4 stars out of 5

I think this was a succinct overview of several articles. I have found faculty and clinicians more willing to accept innovations manuscripts with limited outcomes during this pandemic to share experiences. I wonder if that will continue. My concern is the lack of long-term questions in the discussion that address the outcomes of health professions education ------- is there a point that disruption affects the career of a clinician? Is there a truly foundational knowledge, and more importantly, skill level that must be done in person. Are we assuming virtual is just as good with no long term data? (which interestingly many scholars vehemently advocate against prior to this) Have we gone from adaptability to acceptability with no actual outcomes? Do the multiple-choice tests equal clinical practice 5 years later? These are my questions and I am concerned decisions we are making now with less information may adversely affect careers later. As far as faculty, I am uncertain about workplaces and conferences. There are some intangible difficult to measure items about those to include connection and career enhancement theorized to decrease burnout. Overall I agree that there are so many questions this pandemic has caused in health professions education.

**Competing Interests:** No conflicts of interest were disclosed.

**Reviewer Report 10 July 2020**

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Ben Canny
Monash University

This review has been migrated. The reviewer awarded 4 stars out of 5

Thank you for this article and summary of the reports published in MeEdPublish about responses to the COVID-19 pandemic. While somewhat out of the scope of the article, COVID-19 does present the opportunity for the assumptions that underpin many of our educational practices to be unpicked and challenged. This should represent a valuable field of educational scholarship into the near future, as suggested by the authors.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 08 July 2020

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Viktor Riklefs
Karaganda Medical University

This review has been migrated. The reviewer awarded 5 stars out of 5

Very nice and timely publication. I was just going to look at MedEdPublish for COVID-19 articles as we plan for the next academic year, and email came in suggesting me to read this one. It saved me time from reading all 39 published articles by providing very good summary of main conclusions and directions for further development and innovation at the time of crisis.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 08 July 2020

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Megan Anakin
University of Otago
This review has been migrated. The reviewer awarded 4 stars out of 5

Thank you for summarising recent articles related to the COVID-19 pandemic in MedEdPublish. To help the reader, the authors may wish to put the methods section after the background section so the warrant for the review is clearly established before the methods are described. The sample of 39 articles produced six themes reported in the results. I noted that they reflect the challenges and opportunities that my colleagues and I have experienced at our medical school in New Zealand. The questions raised in the discussion will be useful to stimulate conversations with colleagues and help us to think about how we might design research study that evaluates the strategies we have adopted during the disruption to our educational programmes.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 08 July 2020

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BALAJI ARUMUGAM
TAGORE MEDICAL COLLEGE AND HOSPITAL

This review has been migrated. The reviewer awarded 4 stars out of 5

It's a great pleasure to read the commentary on the perceptions of health professions educators with the review of 39 articles published under Mededpublish. Authors are appreciated for publishing such a wonderful work. The technology use with adaptation towards curriculum and assessment to impact the learners is a great task for the past three to four months. Lock down periods were initially taken as a relaxation time for many of us but as gradually the days went on, we were forced physically/mentally to get adapted for the situation. The colleges/medical schools were closed for almost more than 2 months without regular personal classes and were transformed into virtual classes. The syllabus can be covered but how to ensure that the students have become competent. Online / Virtual classes can be taught but the assessment has become a bigger task especially after the implementation CBME from 2019 onwards under medical council of India. Good work by the authors. It's worth reading this commentary. Thanks

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 08 July 2020

https://doi.org/10.21956/mep.19140.r27662
Poh-Sun Goh
National University of Singapore

This review has been migrated. The reviewer awarded 4 stars out of 5

Thank you to the Editorial team for inviting me to review this paper. This paper is a timely, informative, and thought provoking snapshot of three months of published work in MedEdPublish, reflecting and describing the clinical and academic response to the COVID-19 pandemic by the authors of the published papers. The spectrum of published papers, their range, and depth (of discussion); as well as the audience of these papers (views - readership numbers, open reviews - number and range of comments, and citations - for example on Google Scholar) give readers of MedEdPublish, and medical education scholars impressions and insights on what is topical, of value, potentially useful and of impact within the themes and topics available, visible and accessible on this open access, rapid, post-publication peer reviewed online journal. Examples of analytics (above), both quantitative and qualitative, and reflection on both published ideas, and visible commentary/reviews and engagement by the readership of MedEdPublish I believe adds to, and extends the ideals of Educational Scholarship and supports our aspirations as Digital Scholars. I commend the leadership of AMEE and MedEdPublish for their vision and commitment to launch and sustain the MedEdPublish scholarship platform, as well as the extremely hardworking committed editorial and administrative team at MedEdPublish. The fact that the AMEE community has embraced, and uses the MedEdPublish platform, to both publish, as well as read and engage with the material is evidence of the value-add and impact that this platform has for the members of AMEE, and communities of practice and interest within the AMEE membership, as well as wider medical education community.

Competing Interests: No conflicts of interest were disclosed.
This is an insightful, thought-evoking article in relation to healthcare education during the COVID crises. It provides a detailed account in the way in which healthcare education (especially within the placement setting) had to make rapid adjustments in order to provide students with as much clinical experience when practicing within tighter caseloads and more stringent infection control practices. It highlights the challenges that assessments bring to educators and how being adaptable through a digital platform has provided some strategies. The questions towards the end of this article provide researchers with a springboard to which further research can be conducted. A very good read.

**Competing Interests:** No conflicts of interest were disclosed.

Reviewer Report 07 July 2020

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**Samar Ahmed**
Ain Shams University Faculty of Medicine

This review has been migrated. The reviewer awarded 4 stars out of 5

I like this article so much. I truly think the authors Dis a great job analyzing the transition. I would like to draw the attention of the authors to a An articles that was not mentioned and could be a great addition to this work. https://www.mededpublish.org/manuscripts/3079I would also propose that the conclusion and highlights Showcase more what the areas of innovation were that will remain sustainable after the end if this COVID time. Evaluation of the initiatives use especially planned long term impact assessment is a meeting ch needed domain in the future as indicated in the conclusion. Congratulations on the exceptional work.

**Competing Interests:** No conflicts of interest were disclosed.