Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Non–Covid-19 clinical research in the era of pandemic

The Covid-19 pandemic has seized the medical landscape and drained national and local resources. The day-to-day clinical practice of our research hospitals has been disrupted by the relentless spread of this disease, which has had a secondary effect on our ability to perform clinical research. As we innovate and accommodate in the treatment of the disease, will clinical researchers also be able to adapt to life in the age of Covid-19? Unfortunately, there are no real-time data that show what stratagems and best practices are applicable to research in the shadow of this pandemic. The result so far is that the majority of clinical research has come to a screeching halt. While the imperative to save lives during the Covid-19 pandemic is undeniable, there may be unintended and unfortunate consequences for dropping other areas of clinical research.

Doing non-Covid-19 research may seem non-essential or even a luxury when a pandemic is claiming lives. This forces us to reconsider our motives and goals; some may even feel guilty for focusing on projects not directly related to Covid-19. Can clinical researchers justify spending resources on non-Covid-19 research? We believe the answer is an emphatic yes. This would not mean turning our backs on the pandemic surrounding us. Patients with Alzheimer's, cancer or heart disease are all too often also Covid-19 patients. The same duality is true of many clinical researchers, who are also serving on the frontlines caring for patients. The roles of researcher and clinician have never been mutually exclusive.

Medical research, like clinical practice, is always looking ahead to the next challenges. The best preparedness plans include resource reallocation, priority shifting and surge planning [1]. We are the first responders in clinical practice during this pandemic, but we also retain our responsibility on the frontlines of research. It will take a coordinated effort, but we are capable of maintaining our commitment to research so we can provide timely feedback to policymakers and administrators as they decide the best course of action in the midst and aftermath of this pandemic.

Emergency preparedness for clinical research is impossible without collaboration. As researchers tend to remain in their unique niches, there should be a robust system to impel researchers to collaborate between disciplines and specialties. In the current pandemic, it has been of absolute importance for emergency medicine clinical researchers to create guidelines and share clinical findings with colleagues in internal medicine, critical care and other specialties. Though we should not wait for a pandemic to drive partnerships, the Covid-19 pandemic has shown the ability of researchers to collaborate. Researchers have been more transparent with their work in order to save lives, not waiting to publish first in medical journals [2]. The world needs researchers working together to get the most accurate and timely information.

Conducting clinical research during a pandemic is not without risk. In many institutions, risk avoidance has been the reason that non-Covid-19 projects have been suspended. Of course, the safety of patients and staff comes first. Performing bedside surveys, interactions or interventions increases the risk of exposure to the virus. It is difficult to justify using the already limited supply of personal protective equipment (PPE) when healthcare workers must ration inadequate supplies just to do daily patient care. This risk could be mitigated by making plans in advance to allocate, manage and recycle PPE for research purposes. Tele-medicine might also play a role: patients could give virtual consent to participate in research in order to avoid the risk of exposure at the bedside.

Fundamental to any research project is funding. Various organizations have funded efforts to support and accelerate research dedicated to Covid-19. Institutional Review Boards have expedited approval processes as well. However, there has been a frustrating delay in making those funds available. The speed of infections and deaths during this crisis means that even one day's delay is a day with more deaths. The only way to counteract this delay is to have funds on reserve that can be mobilized early and quickly in a time of crisis. Getting funding for research in the post-pandemic era may be even more difficult. With the gap in clinical revenue caused by this pandemic, many sources of internal funding and faculty support are already disappearing. Mitigating the effects of these inevitable challenges must also be part of the plan.

More than ever before, there is a need for clinical researchers to conduct their projects wisely and strategically. Covid-19 has made it clear that the only way to improve patient outcomes is to improve medical science and innovation. Together with our patients, we can search for and find solutions to defeat this and future pandemics. It is imperative that clinical researchers consider collaboration, risk mitigation and funding as critical factors in emergency preparedness for research.

Author contributions

Onyinyechi F Eke, MD: Conceived idea, wrote and edited manuscript.
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Declaration of competing interest

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References

[1] Hick JL, Biddinger PD. Novel coronavirus and old lessons — preparing the health system for the pandemic. N Engl J Med. March 25, 2020. https://doi.org/10.1056/nejmp2005118.

[2] Apuzzo M, Kirkpatrick D. Covid-19 changed how the world does science, together. New York Times. April 1, 2020 Updated April 14, 2020 . https://www.nytimes.com/2020/04/01/world/europe/coronavirus-science-research-cooperation.html?action=click&module=Top%20Stories&pgtype=Homepage; 2020. [Accessed 12 April 2020].

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