

EDITORIAL

The Impact of COVID-19 Pandemic on Research

Azlini Ismail

Department of Fundamental Dental & Medical Sciences, Kulliyah of Dentistry, International Islamic University Malaysia

Since the imposition of the Movement Control Order (MCO) by the government of Malaysia on 18th March 2020 due to the COVID-19 pandemic, local universities have been obedient and acted in line with the government's policy. The education sector at this moment was considered as non-essential activities, thus the university only operated at its minimal strength during the MCO. Most local university guidelines stated that staff was not allowed to be on campus except for those in critical services. In line with that, the postgraduate students or staff were eventually not allowed to enter the labs, with the exception only for those taking care of animal husbandry. With these, research activities were put on hold and thus research have been greatly impacted especially for those experimental-based researches that require physical experimentation in laboratory facilities. Similarly, community-based research was also being halted in this condition since no face-to-face data collection can be done during this period of time.

Reflecting on this situation, government funded-grants were given automatic extensions and this has certainly relieved the worries of most researchers. The Ministry of Higher Education (MOHE) has also come out with the initiative by inviting proposal submission through the Malaysia Greater Research Network System (MyGRANTS). This short-term grant

should revolve around the public's lives during the MCO period and post-COVID-19, amounting to RM20,000 for each research (NewStraitsTimes, 2020). Some research facilities that work on COVID-19 from this point of time are then allowed to be opened, subject to the universities' approval.

MOHE in the press statement released on 27th May 2020 announced that the post-graduate students under research mode who require specific laboratory facilities or equipment to conduct research are allowed to resume their research on campus starting 1st June 2020. This decision was expected to affect 31,503 students in higher education institutions who need to carry out research in labs, design studios, or workshops using specialized equipment (Zolkepli, 2020). The research then has resumed back during the Recovery Movement Control Order (RMCO), but with stricter regulations and standard operating procedures.

Nevertheless, the COVID-19 pandemic has actually opened up doors for new research prospects, especially those revolving around COVID-19. Research groups on this research theme were immediately formed across the globe, and this has actually shows the concept of universal brotherhood and togetherness. The sharing of knowledge and findings since the pandemic outbreak has then occurred really fast. Databases like 'Wiley Covid-19 Resources' (Wiley, 2020), 'NCBI SARS-CoV-2 Resources' (National Center for Biotechnology Information, 2020), and the 'NIH Open-Access Data and Computational Resources to Address COVID-19' (National Institute of Health, 2020) were created as open-sharing platforms specifically for resources pertaining COVID-19. In addition, reputable journal

publishers such as Elsevier (2020), Springer (2020), SAGE (2020), and PLOS (2020) have allowed fast track review process for those articles on this theme and this has actually helped the research progress on COVID-19.

The excellent progress of research made by researchers from all over the world has made potential vaccines' research and development much faster than usual. As of 28 October 2020, there are currently more than 100 COVID-19 vaccine candidates under development, and some are already in the human trial phase (WHO, 2020). In addition, the world has currently developed a significant number of diagnostic techniques employing the nucleic acid amplification tests or NAAT which include the reverse transcriptase-polymerase chain reaction (RT-PCR) to diagnose current COVID-19 infection as well as antigen testing (Caliendo & Hanson, 2020). From the expensive price of diagnostic technique with high reliability and accuracy, now the diagnosis can be made at a more affordable price with acceptable standard (BBC, 2020).

Researchers in the field of big data, public health, pure, applied, and medical sciences, as well as the social sciences from our local universities, government institutions, and also private companies, have made some excellent contributions to the research and innovations on COVID-19 (Aman, 2020; Arumugam, 2020). For instance, our Malaysian data scientist has created CoronaTracker, a one-stop platform that offers real-time data of confirmed COVID-19 cases and death across the globe, and at the same time, it provides global and local news updates on the COVID-19 (Arumugam, 2020). In addition, MY E.G. Services Bhd (myEG), the Malaysia's e-government service

provider has developed a COVID-19 risk profiling system using the advanced artificial intelligence technology (Aman, 2020). Involvement of few government agencies including the National Security Council (NSC), the Ministry of Health (MOH), the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU), the Malaysian Communications and Multimedia Commission (MCMC), and the Ministry of Science, Technology and Innovation (MOSTI) have innovated MySejahtera application software for monitoring the spread of COVID-19 ("MySejahtera," 2020). In addition, our local university has also made an excellent innovation by creating Hybrid Rapid Test Kit, acclaimed to have the same accuracy as the laboratory tests (Muzamir, 2020; Nasir, 2020).

Herein, until the world has resolved from this COVID-19 pandemic, there will always be uncertainties of the policies governing the conduct of research and this may greatly influence the trend of future research. We can perhaps speculate that the research on the COVID-19 theme will continue to be spearheaded in the future. We might also see an increase in the number of researches that will not involve physical experimental setup in laboratory facilities. It is also expected that the research that involves survey as the data collection instrument will be changed from the traditional face-to-face medium into the online medium. Regardless of whichever research designs that our local researchers advocate for in the future, hopefully, they can sustain in this challenging period.

Dr. Azlini Ismail
Deputy Editor-in-Chief,
IIUM Journal of Orofacial and Health Sciences
Email: dr_azlini@iium.edu.my

References

- Aman, A. S. (2020). MyEG unveils AI-powered Covid-19 risk profiling system. *New Straits Times*. Retrieved from <https://www.nst.com.my/business/2020/02/567108/myeg-unveils-ai-powered-covid-19-risk-profiling-system>
- Arumugam, T. (2020). CoronaTracker offers real-time data on outbreak. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/nation/2020/01/560411/coronatracker-offers-real-time-data-outbreak>
- BBC (2020). India's new paper Covid-19 test could be a 'game changer'. Retrieved 28 October 2020, from <https://www.bbc.com/news/world-asia-india-54338864>
- Caliendo, A. M., & Hanson, K. E. (2020). Coronavirus disease 2019 (COVID-19): Diagnosis. *UptoDate*.
- Elsevier (2020). Call for Papers: Coronavirus Disease Outbreak-2019 (COVID-19). Retrieved 27 October 2020, from Elsevier <https://www.journals.elsevier.com/journal-of-clinical-virology/call-for-papers/call-for-papers-coronavirus-disease-outbreak-2019-covid-19>
- National Institute of Health (2020). Open-Access Data and Computational Resources to Address COVID-19. Retrieved 27 October 2020, from <https://datascience.nih.gov/covid-19-open-access-resources>
- National Center for Biotechnology Information (2020). NCBI SARS-CoV-2 Resources. Retrieved 25 October 2020, from <https://www.ncbi.nlm.nih.gov/sars-cov-2/>
- Muzamir, M. Y. (2020, 14 September 2020). Saintis negara cipta kit ujian pantas COVID-19. *Berita Harian*. Retrieved from <https://www.bharian.com.my/berita/nasional/2020/09/731409/saintis-negara-cipta-kit-ujian-pantas-covid-19>
- MySejahtera (2020). Retrieved 28 October 2020, from <https://mysejahtera.malaysia.gov.my/intro/>
- Nasir, M. (2020). Malaysia's scientists invent COVID-19 rapid test kit. Retrieved 28 October 2020, from <https://news.iium.edu.my/?p=142739>
- New Straits Times (2020). Higher Education Ministry offers grants for post-Covid-19 research. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/nation/2020/04/583698/higher-education-ministry-offers-grants-post-covid-19-research>.
- PLOS (2020). COVID-19 Updates. Retrieved 27 October 2020, from <https://plos.org/covid-19/>
- SAGE (2020). COVID-19 Articles Accepted for Fast-Track Publication in Psychological Science. Retrieved 27 October 2020, from <https://journals.sagepub.com/page/pss/covid-19>
- Springer (2020). Announcement: COVID-19 impact on peer review Retrieved 27 October 2020, from <https://www.springer.com/journal/38/updates/17991816>
- WHO (2020). The push for a COVID-19 vaccine. Retrieved 28 October 2020, from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/covid-19-vaccines>
- Wiley (2020). COVID-19 Resources. Retrieved 27 October 2020, from <https://www.wiley.com/network/covid-19-resources>
- Zolkepli, F. (2020, 18 May 2020). Post-grad students allowed to conduct research on campus. *The Star*. Retrieved from <https://www.thestar.com.my/news/nation/2020/05/18/post-grad-students-allowed-to-conduct-research-on-campus>