Global Research in Anatomy and Physiology During COVID-19: Lessons Learnt and Future Recommendations

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<u>Abstract</u>

The ongoing Coronavirus Infectious Disease 2019 (COVID-19) pandemic has caused a significant disruption in several areas of research within the fields of Anatomy and Physiology. With the whole world coming to a standstill, research of any kind was difficult to pursue, especially in these disciplines requiring kinesthetic/tactile application of concepts or testing hypotheses through hands-on engagement, as the new social guidelines and risks to certain groups of people hindered up-to-date research-data collection. However, with new technology and protocols created or adopted, there has been an effort to better help students and scientists to conduct research remotely; such alternatives cannot effectively replace but could be utilized to complement or supplement physical means of experimentation, for instance, anatomical and physiological research on cadavers or volunteers, development of vaccines, etc. This study, for the first time, analyzes globally published reports on the key lessons learnt during COVID-19 about Anatomy and Physiology research, along with recommendations to help prepare for future pandemics. COVID-19 has challenged as well as transformed much of how research is conducted worldwide in Anatomy and Physiology, with both negative as well as positive aspects being discovered that could revolutionize these critical STEM and healthcare disciplines.

Keywords: COVID-19 pandemic, global anatomy research, global physiology research, lessons learnt, future recommendations