

Dental Research at Stake in COVID Era

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Journal of Scientific Dentistry (2021): 10.5005/jp-journals-10083-0944

It has been more than a year now, and the pandemic battle is still on. Although we got hope with vaccines, the non-stop mutation of the virus, and the varied virulence, clinical features, and mortality rates, it is tough for the epidemiologists and scientists to give their final comment on the end of coronavirus disease-2019 (COVID) battle. The pandemic had put a halt to all social, religious, political get-togethers including the academic conferences, and forced us to get adapted to the new normal with soap, masks, and social distancing (SMS). Within this 1 year, several spheres of our life have become virtual. The multiple ongoing waves hit the world, downgrading the economy, research, and the overall quality of every individual's life.

In a developing country like India, irrespective of the educational status and awareness, importance is given for personal healthcare, only with relevance to risk or morbidity and cost ratio. The patient will attend to medical ailments that cause serious threats but ignore their dental needs. The shattered economy increased the risk of infections via aerosols, and the broken families due to COVID will set back dentistry as a whole, not the research alone.¹ But this is not the end. It is again a period of transition. The dental academicians, researchers, clinicians, equipment, and material manufacturers, all have to work hand in hand to swiftly overcome this situation by facilitating mankind more.

The ethical committee regulations need to be modified to facilitate research in the resource-constrained set up particularly for those involving human participants. Studies with a huge sample size may not be practically feasible at this pandemic, and the statisticians need to give us a solution for increasing the power of the study with less sample size. On the other side, ongoing researches and clinical trials face a lot of challenges in terms of intervention in the required sample size, follow-up, laboratory data, confounding factors from the infection or treatment of COVID in the study samples, etc. The World Health Organization gave guidelines for ethical committees to follow for COVID-related research.² Similarly, the general guidelines that were existing earlier, need to be modified and circulated to align with the new normal. The enrolment of patients for dental clinical trials itself is going to be difficult due to the life-threatening impact of the pandemic.

The funding agencies have to recognize the dental research equivalent to the medical research and be generous in supporting them. Relaxation in the timeline for completion of the researches and more funding opportunities will facilitate the dental researchers. When viewed from an optimistic perspective, the pandemic poses multiple new research opportunities in dentistry.^{3,4} Starting from the education, patient care in terms of clinical conditions, clinical safety measures, techniques and materials, and also for public health policies, research is the one and the only solution that can provide adequate evidence to

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How to cite this article: Shivasakthy M, Parija SC. Dental Research at Stake in COVID Era. *J Sci Dent* 2021;11(1):1.

Source of support: Nil

Conflict of interest: None

move further. Dentistry needs to be explored and strengthened with digitally empowered, cost-effective, and fewer appointment procedures that are of short duration without compromising on the quality. Every dental institution should train the budding dentists in teledentistry for facilitating screening appointments. Dental institutions have to overcome the challenges faced in education, clinical care, and research by taking into confidence, both the students and the faculty.⁵ Mobile dental facilities that cater to the needs of disabled and geriatric care will enhance dental care in reaching the unreached population. Dentists from all sectors, have to involve themselves in bringing up the profession by contributing to the practice of evidence-based dentistry⁶ safeguarding the patients as well as themselves in this pandemic era.

REFERENCES

- Sardana D, Yiu CKY, McGrath CP. Impact of COVID-19 on ongoing & ensuing dental research. *J Dent* 2021;106:103590. DOI: 10.1016/j.jdent.2021.103590.
- Saeralathan S, Balaji SK, Lavu V. Dental practice management and research during the COVID-19 pandemic - an overview. *J Anal Pharm Res* 2020;9(3):91-95. DOI: 10.15406/japlr.2020.09.00357.
- Balaji SM. Dental practitioners and dental researchers in COVID-19. *Indian J Dent Res* 2020;31(4):501. DOI: 10.4103/ijdr.IJDR_892_20.
- Júnior HM, Machado RA, Swerts MSO, Martelli DRB, da Cruz Perez DE. Dental research and COVID-19: the beauty of science and its current and future challenges. *Braz Oral Res* 2020;34:e088. DOI: 10.1590/1807-3107bor-2020.vol34.0088.
- Meng L, Hua F, Bian Z. Coronavirus disease 2019 (COVID-19): emerging and future challenges for dental and oral medicine. *J Dent Res* 2020;99(5):481-487. DOI: 10.1177/0022034520914246.
- Kathree BA, Khan SB, Ahmed R, Maart R, Layloo N, Asia-Michaels W. COVID-19 and its impact in the dental setting: a scoping review. *PLoS ONE* 2020;15(12):e0244352. DOI: 10.1371/journal.pone.0244352.