

Teaching and Learning During the Time of Turbulence: Faculty and Residents Perspective

Sir,

The COVID-19 pandemic disrupted the medical education globally, forcing rapid adaptation to virtual learning (VL). While VL ensures educational continuity during crises, it presents significant challenges, especially in medical fields that rely on hands-on training and clinical exposure.¹ VL acts as a time-effective substitute for face-to-face teaching but, its implication is always challenging, and its success depends on the quality of resources, faculty readiness, and technical expertise.^{2,3}

This study aimed to evaluate the adaptability of faculty and residents to VL during the pandemic and to highlight the key challenges they faced. It was conducted at The Aga Khan University Hospital over six months, the study surveyed 81 participants, including both faculty and residents across various specialities. A self-designed questionnaire based on AMEE Guide 87 was used, and responses were analysed using SPSS version 20. The results revealed that 45.4% of residents and 35.4% of faculty participants were male. Most participants (39.5%) fell within the 31-40 age group. Notably, 46.9% of the respondents had previous online learning experience. Zoom and Google Meet were the most used platforms.

The key barriers identified were lack of technological skills (55.6% agreed), technical issues such as poor bandwidth and device malfunction, and difficulties in adapting to the time-consuming nature of VL. Furthermore, a lack of human interaction and challenges in assessing learning outcomes were significant concerns, with 53.1% of participants agreeing that VL complicates student assessment. Despite these challenges, many participants recognised the potential of VL. Over half of them believed that VL should continue as a regular teaching modality, citing its flexibility and cost-saving benefits. Moreover, VL was seen as an effective way to promote social distancing while maintaining educational standards. Our findings suggest that VL, despite challenging, offers substantial opportunities for improving medical education. Addressing technical issues, enhancing faculty and student training, and refining VL platforms will be critical for its sustained success. However, the limited scope of our study focused on a single

centre suggests that further research is needed to assess the generalisability of these findings across broader educational contexts.⁴

In conclusion, the pandemic has highlighted both the limitations and potential of VL. Moreover, investing in technological infrastructure and training will be crucial for integrating VL into mainstream medical education.

COMPETING INTEREST:

The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

SM, FWI, SB: Conceptualisation, interpretation of data, drafting of the manuscript, and revision of the manuscript for important intellectual content.

All authors approved the final version of the manuscript to be published and agreed to be accountable for all aspects of the work.

REFERENCES

1. Park H, Lee YM, Ho MJ, Han HC. How the coronavirus disease 2019 pandemic changed medical education and deans' perspectives in Korean medical schools. *Korean J Med Educ* 2021; **33(2)**:65. doi: 10.3946/kjme.2021.187.
2. Jayakumar N, Brunckhorst O, Dasgupta P, Khan MS, Ahmed K. e-Learning in surgical education: A systematic review. *J Surg Educ* 2015; **72(6)**:1145-57. doi: 10.1016/j.jsurg.2015.05.008.
3. Uzuner S. Questions of culture in distance learning: A research review. *Int Rev Res Open Distrib Learn* 2009; **10(3)**. doi: 10.19173/irrodl.v10i3.690.
4. Yildiz M, Erdem M. An investigation on instructors' knowledge, belief and practices towards distance education. *Malays Online J Educ Technol* 2018; **6(2)**:1-20. doi: 10.17220/mojet.2018.02.001.

Sadia Masood, Faisal Wasim Ismail and Saira Bukhari

Department of Medicine, The Aga Khan University Hospital, Karachi, Pakistan.

Correspondence to: Dr. Sadia Masood, Department of Medicine, The Aga Khan University Hospital, Karachi, Pakistan

E-mail: sadia.masood@aku.edu

Received: August 13, 2022; Revised: October 06, 2024; Accepted: October 19, 2024

DOI: <https://doi.org/10.29271/jcpsp.2025.01.130>

