

Letter to the Editor: Telemedicine in the era of coronavirus 19: Implications for postoperative care in cardiac surgery

Anish Verma¹, Rachel Pathimagaraj¹, Daniel Warrington¹, and James Whiteway¹

¹The University of Manchester Faculty of Biology Medicine and Health

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Contributing Authors:

1. Anish Verma (Corresponding Author) – Fifth Year Medical Student
2. Rachel Pathimagaraj – Fourth Year Medical Student
3. Daniel Warrington - Fifth Year Medical Student
4. James Whiteway - Fifth Year Medical Student

All authors are based at the United Kingdom institution, The University of Manchester – Faculty of Biology, Medicine and Health.

Main Document

As medical students based at The University of Manchester, we welcome the article “*Telemedicine in the era of coronavirus 19: Implications for postoperative care in cardiac surgery*” with great interest.¹ Telemedicine has rapidly expanded to become an integral component of healthcare delivery during the COVID-19 pandemic, following unprecedented restrictions on social contact. During our medical education, we have observed the impact of telemedicine first-hand during clinical practice with respect to maintaining social distancing measures, maximising resource efficiency and expanding connectivity. This study is commendable in being the first to evaluate the use of telemedicine in postoperative care following cardiac surgery, during an era where simulation-based training is essential for cardiac surgery trainees.²

The study was appropriately designed through its inclusion of specific questions, which have been frequently validated in previous studies evaluating wider implications of telemedicine.³ It examined a number of relevant issues pertinent to telemedicine, including perceived utility, patient satisfaction and efficiency. Furthermore, the combined use of the Likert scale and qualitative measures allowed for stronger and clearer conclusions to be drawn. Significantly, the use of a secure platform for recording responses was an appropriate means of ensuring that patient confidentiality remains protected. A particular limitation within this study was the absence of a control group. In accordance with the hierarchy of evidence, results from a cross-sectional study are generally weaker in quality as compared to a case-control study. The resulting sampling bias and low response rate limits the external validity of this study’s findings. Furthermore, the interviewer bias and possible recall bias presents a challenge to the internal validity of the study.

Notably, similar findings were found in other studies evaluating the impact of telemedicine in the context of postoperative care during the COVID-19 pandemic. This includes those relating to laparoscopic surgery⁴ and neurosurgery.⁵ Strikingly, whilst the outcomes of these studies demonstrated the safe, effective and patient-preferred use of telemedicine, this could not be applied in the context of cardiac surgery, as per the study by

Sallam et. al. A potential reason for the preference of in-person follow-up may be due to the multidisciplinary, lengthy and complex nature of postoperative care programmes after cardiac surgery. Furthermore, the studies highlighted the well-established barriers associated with telemedicine, such as technical issues, which may also contribute as a significant factor.

To conclude, this article highlights that the recent use of telemedicine in postoperative care following cardiac surgery can result in high patient satisfaction. However, there remain doubts over its long-term integration into standard practice for cardiac surgery after the pandemic, particularly as a significant proportion of patients still prefer face-to-face consultations for postoperative care. Further studies are needed to address patient hesitancy surrounding telemedicine in this field and should account for the aforementioned limitations of this study. Regardless, telemedicine retains the potential to be a significant aspect of future postoperative care following cardiac surgery. If so, we maintain that it is imperative that the curriculum at medical school is adjusted accordingly to prepare cardiac surgery trainees for this.

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