QI4: Telemedicine in COVID-19 Pandemic: Anaesthetic Assessment of Elective Surgical Patients through Mobile Application based Questionnaire

Jacklyn Yek, Joanne Yeo, Shu Huei Neo, Kor Kwan Chan, Avinash Gobindram

Department of Anaesthesia & Surgical Intensive Care, CGH

Background

The pre-anaesthetic assessment is important for assessing and optimizing patients' premorbid medical status to reduce perioperative morbidity and mortality. It improves patient satisfaction by providing an opportunity to educate patients, allay anxiety and minimise operative delays, cancellations and postoperative complications. With the COVID-19 pandemic, an electronic pre-anaesthetic questionnaire (ePAQ) via a mobile application was implemented to identify ASA 1 patients. The aim was to replace face-to-face consultation and minimise hospital visits.

Methods

The study was conducted between October 2019 to October 2020. In the first part, validation of ePAQ was conducted by recruiting patients aged 18-44 years old undergoing non-major surgery to fill in the ePAQ and an ASA score was assigned by an anaesthetist. This ASA score was validated against an ASA score when reviewed by a different anaesthetist as part of the usual preanaesthetic assessment. The second part involved assessing patient satisfaction where patients filled in the ePAQ and a telephone consultation was conducted. Patients deemed ASA 1 would subsequently undergo surgery without a face-to-face consultation.

Results

A total of 201 patients were recruited. The reliability of ePAQ was found to be 0.854 using Cronbach's alpha, suggesting that it is a reliable tool. Patient satisfaction was similar between

both groups of patients. Both the PAAC and ePAQ patient cohort felt reassured and well taken care of. There were no on-the-day cancellations.

Conclusion

Initial evaluation of ePAQ suggests that it has good reliability. It not only improves patient satisfaction but is robust in decreasing on-the-day cancellations.

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Patient satisfaction, Pre-anaesthetic assessment, Surgery cancellation, Telemedicine, Mobile Applications