

617 Does Wearing Enhanced Personal Protective Equipment (PPE) In Theatre Increase Surgeon Workload and Patient Morbidity?

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Introduction: Delivery of surgical services during the Covid-19 pandemic has required the use of enhanced PPE in the operating theatre. We sought to evaluate the impact of this change on surgeon workload and intraoperative patient outcomes.

Method: Surgeons performing as primary operator completed an on-line procedure-specific questionnaire on workload ratings for each operative case, using an extension of the validated Surgeon Task Load Index (SURG-TLX) tool (reported on a 20-point scale), together with operative details. Local approval was obtained at individual sites. Data was analysed in Stata SE v16.

Results: 118 responses (17 surgeons, 7 specialties) were collected from June to September 2020. 77.1% used enhanced PPE. There was no association between enhanced PPE use and overall workload ($p = 0.151$) as measured with SURG-TLX, although surgeons wearing enhanced PPE commonly reported finding individual procedures harder than expected (37% vs 0%, $p < 0.001$). Communication was rated worse when using enhanced PPE use (MD -4.38, 95%CI -6.74 to 02.03; $p < 0.001$). There was no association between enhanced PPE use and intraoperative complications ($p = 0.745$).

Conclusions: The use of enhanced PPE is not associated with complications or increased surgeon workload assessed by SURG-TLX. It is, however, associated with difficulty in communicating, and subjectively experiencing more procedural challenge than anticipated.