AB155. SOH21AS124. Investigating the receptivity to virtual reality in surgical training: a survey based analysis in the Department of Surgery in Midland Regional Hospital Tullamore (MRHT)

Jessica Bujouves¹, Aoife Feeley², Eoin Sheehan², Dermot Hehir^{1,2}

¹University of Limerick School of Medicine, Limerick, Ireland; ²Department of Orthopaedic Surgery, Midland Regional Hospital Tullamore, Tullamore, Ireland

Background: In surgical training, virtual reality (VR) has the potential to expedite acquisition of surgical skills and prepare surgical trainees for independent practice—especially in the COVID-19 era. While research has shown that VR can increase efficiency and improve patient safety, the receptivity of surgical consultants and trainees must continue to be explored in order to better understand how it can be integrated into current medical education. This study aims to investigate attitudes, prior experience and barriers to use of virtual reality simulation across surgical specialities in MRHT.

Methods: An online survey was distributed to Surgical Consultants, Non-Consultant Hospital Doctors (NCHDs) and medical students on clinical rotation in three surgical specialities including; Otorhinolaryngology, General and Orthopedic Surgery in MRHT.

Results: Sixty-six questionnaires were circulated, with a 90.9% (60/66) response rate. 78.3% (47/60) participants indicated little or no prior experience using VR, with 86.7% (52/60) indicating a strong interest in its use. 91.6% (55/60) believed VR could significantly enhance surgical training, while 86.7% (52/60) felt VR could expedite surgical training

and supplement medical education during COVID-19. Additionally; 70.0% (42/60) participants believed VR could be used to assess the level of competency required prior to undertaking independent surgical practice.

Conclusions: Our findings demonstrate a strong enthusiasm across all levels of experience for the integration of VR into current surgical based education. Further exploration of its use as an adjunctive tool in assessing proficiency and skill acquisition in both undergraduate and postgraduate curricula is warranted.

Keywords: COVID-19; medical education; surgical training; simulation training; virtual reality (VR)

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the noncommercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: https://creativecommons.org/licenses/by-nc-nd/4.0/.

doi: 10.21037/map-21-ab155

Cite this abstract as: Bujouves J, Feeley A, Sheehan E, Hehir D. Investigating the receptivity to virtual reality in surgical training: a survey based analysis in the Department of Surgery in Midland Regional Hospital Tullamore (MRHT). Mesentery Peritoneum 2021;5:AB155.