EP.TU.566**Virtual Interactive surgical skills classroom – An Ongoing Randomized Controlled Trial**

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Introduction: High costs and inaccessibility are significant barriers to face-to-face basic surgical skills (BSS) training. Virtual classrooms enable the combination of computer-based learning with interactive expert instruction. They may optimise resources and increase accessibility, facilitating larger-scale training with a similar educational benefit. We aim to evaluate the efficacy of virtual BSS classroom training compared to both non-interactive video and face-to-face teaching.

Method: 72 medical students will be randomly assigned to three equal intervention groups based on year group and surgical skill confidence. Interventions will be implemented following an instructional video. Group A will practice independently, Group B will receive face-to-face training, and Group C will attend a virtual classroom. Participants will be recorded placing three interrupted sutures with hand tied knots pre- and post-intervention, and Objective Structured Assessment of Technical Skills (OSATS) will be blind marked by two experts. Change in confidence, time to completion and a granular performance score will also be measured. Each intervention's feasibility and accessibility will be assessed.

Results: Data collection will be completed in February 2021. Significant improvement in OSATS within groups will be indicative of intervention quality. Difference in improvement between groups will determine the relative performance of the interventions.

Conclusion: To our knowledge, this will be the largest randomised control trial investigating virtual BSS classroom training. It will serve as a comprehensive appraisal of the virtual classroom's suitability as an alternative to face-to-face training. The findings will assist the development of further resource-efficient training programs during the COVID-19 pandemic and afterwards.