

The MssPOPVhyst: A low fidelity vaginal hysterectomy simulation model for mass surgical training in Urogynaecology

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ABSTRACT

Introduction: Surgical training in urogynaecology is now limited, attributed to concern for patients' safety and an increase in medical litigations. Training by simulation overcomes technical challenges and provides a safe learning environment. Simulators for pelvic floor surgeries including vaginal hysterectomy (VH) is currently limited. **Objective:** To demonstrate the construction of a low-fidelity, cost-effective VH simulation model and assess its acceptability and feasibility. **Materials and Methods:** Construction of a VH simulator, using low-cost, widely accessible materials, is demonstrated. Costs and time were calculated, followed by the assembly steps and a simulated VH. Participants' feedback (from a VH simulation workshop using the MssPOPVHyst), involving 27 questions, assessing the technicality of the model and participants' hands-on experience, was retrospectively analysed. **Results:** The construction of MssPOPVHyst was completed utilising a silicone ball, plastic cup, sock, long balloons, cling film, glue, double-sided adhesive tape, a box and a cardboard platform, in 20 minutes/model preparation time. The total recurring cost was RM12.50/model. Surgical anatomy relevant to VH was well represented. Of 60 simulation workshop participants, the majority (66.7%) were medical officers or O&G trainees. 27 (69.2%), 29 (74.4%) and 27 (69.2%) felt that the model is user-friendly, resembled relevant anatomy, tissue quality and deformation, respectively. 22(56%) agreed that the steps of the simulated VH were realistic, and 66%-69% agreed that the simulation improved their overall knowledge of surgical steps and confidence. **Conclusion:** MssVPOPVHyst is a low low-fidelity VH simulator which is cost-effective, easily assembled, user-friendly, with good anatomical and tissue quality resemblance, ideal for mass-simulated surgical training, especially in resource-limited areas.