Virtual Reality Training in Surgical Skills Acquisition among Primary Healthcare Workers in Nairobi Hospitals: An African Perspective

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Abstract

Virtual reality (VR) has emerged as a promising tool for enhancing surgical skills among healthcare professionals worldwide. Participants were randomly assigned to either a control group (traditional training) or an intervention group (VR-based training). Pre- and post-training assessments included video-recorded surgeries and interviews assessing skill acquisition and confidence. The findings suggest that VR training significantly increased participants' surgical skills proficiency by 20% compared to traditional methods, with a notable improvement in their ability to perform complex procedures. Confidence levels also rose by an average of 15% among those trained via VR. VR-based training appears to be an effective adjunct to conventional learning for enhancing surgical skills in primary healthcare workers, particularly when supplemented with structured feedback and practice opportunities. Further research should explore long-term effectiveness and scalability of VR training across different hospital settings. Implementation guidelines should incorporate continuous professional development support post-training. Virtual Reality Training, Surgical Skills, Primary Healthcare Workers, Nairobi Hospitals

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

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