Exploring of Modern Technologies in Medical Training: Insights from Case Western Reserve University for Georgian Medical Education

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Abstract

This research explores the integration of modern technologies in medical education by analyzing Case Western Reserve University's simulation-based learning approach and its potential application in Georgian medical education. Through semi-structured interviews with faculty members and Georgian medical education stakeholders, including students and educators, this study identifies specific technologies that enhance skills acquisition and clinical preparedness. The research evaluates how simulation-based training impacts students' practical skills development and confidence in clinical settings. Findings suggest that immersive technologies such as virtual anatomy labs, high-fidelity patient simulators, and mixed reality applications significantly improve student engagement, retention of complex concepts, and development of critical clinical reasoning skills. The study further examines the feasibility and potential challenges of implementing similar technological frameworks within Georgian medical institutions, considering infrastructure requirements, faculty training needs, and cultural adaptations necessary for successful integration. This research provides valuable insights for medical education reform in Georgia, offering evidence-based recommendations for technology adoption that could bridge the gap between theoretical knowledge and practical clinical competence.

Keywords

Medical education, simulation-based learning, virtual reality, Georgian medical training, healthcare technology, skills acquisition, Case Western Reserve University.

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