



Enhancing Cross-Profession Instruction Effectiveness for Six Core Clinical Skills in the Post-Pandemic Era

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Background / Objective

The COVID-19 pandemic, which began in late 2019, has significantly impacted clinical teaching methodologies worldwide(Alsoufi et al., 2020). In teaching hospitals, training in essential clinical skills—key to healthcare quality and patient safety—faced particular challenges(Frenk et al., 2022). Since clinical skills require hands-on, practical assessment beyond what paper-based tests can offer, this study explores a hybrid teaching model(Enoch et al., 2022). This model combines video-based courses with practical on-site exercises delivered through cross-profession instruction, in which nurses were equipped with the competencies to teach six core clinical skills to medical students.

Methods

A hybrid teaching model was employed, wherein experienced internal medicine physicians initially provided training to nurses. These nurses then conducted online courses that incorporated the six core clinical skills. Assuming the role of clinical caregivers, the trained nurses imparted their knowledge to medical students, integrating common clinical cases into their teaching. The instruction began with slideshow presentations, followed by practical, hands-on experiences for the students. The effectiveness of the training was assessed through pre- and post-tests with the medical students, followed by statistical analysis using SPSS. Descriptive statistics were used for basic analysis, and paired sample t-tests assessed the significance of the pre- and post-course differences.



Results

This study involved 103 clinical medical students, comprising 70 males (68%) and 33 females (32%), predominantly aged 20–25 years (67%). Significant improvements were observed across the six core clinical skills. Notably, the mean difference for intravenous catheter injections was -0.86 (SD = 0.56, P <0.0001), IV push -1.13 (SD = 0.73, P <0.001), blood pressure measurement -0.51 (SD = 0.58, P <0.001), blood glucose measurement -0.47 (SD = 0.59, P <0.001), temperature measurement -0.74 (SD = 0.67, P <0.001), and blood oxygen level measurement -0.72 (SD = 0.71, P <0.001). These results underscore the effectiveness of cross-profession instruction in teaching these core clinical skills.

Conclusions

The teaching and assessment of clinical skills in healthcare are undergoing a digital transformation. Integrating six core clinical skills into cross-profession instructional programs has proven to effectively enhance learning outcomes, thereby advancing the practice of patient-centered, holistic healthcare.

Relevance to health promoting hospitals and health services

The pandemic-induced shift in teaching styles-towards self-directed, online, and hybrid modalities-has become a significant aspect of contemporary education.

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