



ASSESSING NURSING STAFF SKILLS IN PROVIDING CULTURALLY COMPETENT CARE: A SIMULATION-BASED STUDY

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Abstract

Cultural competence is essential for quality, equitable nursing care across diverse populations. This study evaluated a customized simulation training focused on building nursing staff skills in providing culturally aware care responsive to patients' values, beliefs, and needs. Using standardized patient actors from six cultural backgrounds, 148 nurses completed videotaped simulation scenarios assessing cultural aspects. Structured debriefing and self-evaluation followed each simulation. Results showed initially low cultural knowledge and variable person-centered care, with marked improvements in cultural skills, sensitivity and tailored interventions after simulation training. Thematic analysis revealed enhanced nurse self-efficacy, insight into contextual complexities, and commitment to ongoing learning. However, biases and stereotyping persisted for some minority groups. Targeted simulation training shows promise for strengthening nurses' cultural capabilities, with implications for nursing education and practice quality improvements.

Keywords: cultural competence, simulation, nursing education, health disparities

Introduction

Population diversity is increasing globally, requiring healthcare providers to respond effectively to patients' varied perspectives, values, and needs (Almutairi et al., 2022). However, most nurses have limited preparation to address cultural factors, contributing to inequities and disparities in minority care (Al-Sharqi et al., 2022). Developing nurses' cultural competence through applied experiential learning is essential to provide equitable, high quality care (Gozu et al., 2007). Immersive simulation offers risk-free opportunity to build skills by interacting with standardized patients from diverse backgrounds (Majumder et al., 2019).

This study implemented and customized simulation scenarios with embedded cultural elements to enhance Saudi nurses' cultural knowledge, attitudes, and tailored care provision capabilities at a tertiary care hospital. The effectiveness of simulation as an education modality for applied cultural competence development was examined to inform curricular improvements.



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Background

Cultural Competence in Healthcare

Cultural competence involves effectively understanding and responding to the unique values, beliefs, and needs of patients across diverse cultural backgrounds (Almutairi et al., 2022). This requires ongoing development of awareness, knowledge, skills and respectful attitudes. Culturally sensitive, person-centered care is linked to improved access, experiences, and outcomes among minority groups (Beach et al., 2005). However, most nurses still lack capabilities.

Relevance for Nursing Practice

Nurses are positioned to profoundly impact care experiences and outcomes through holistic, culturally appropriate interactions (Majumder et al., 2019). However, evidence reveals gaps across knowledge, attitudes, and tailored skills that contribute to disparities (Alghamdi et al., 2020). Nurse education requires applied modalities like simulation to progress cultural competence development.

Conceptual Framework

This study was guided by Campinha-Bacote's model encompassing cultural awareness, knowledge, skills, encounters, and desire as intersecting facets of competence (Campinha-Bacote, 2002). Benner's novice-to-expert framework directed the simulation curriculum design and evaluation to facilitate nurses' skill progression through active practice (Benner, 1984).

Methods

Study Design and Setting

This pre-post interventional study evaluated a cultural competence simulation curriculum for nurses at a 1000-bed tertiary academic hospital in Jeddah, Saudi Arabia between January-April 2022.

Sample

A convenience sample of 148 nurses across medical-surgical units were recruited to participate. Minimum sample size was 120 for a power of 80% based on similar studies detecting pre-post differences after simulation at a 5% significance level (Majumder et al., 2019).

Cultural Simulation Intervention

- The 4-week curriculum comprised 8 hours total of customized high-fidelity patient simulation scenarios engaging nurses in culturally diverse care contexts with professional actors, followed by facilitated debriefing and self-evaluation.

- Simulation cases focused on cultural practices, health beliefs, biased care, communication, and developing trust, empathy and patient-centered interventions.
- Techniques included roleplaying, unfolding case scenarios with ethnodemographic questions, and care prioritization activities.

Measurements

- Cultural knowledge was tested pre-post with a validated questionnaire (Prasad et al., 2010).
- A validated rubric evaluated clinical cultural competence skills in simulations across awareness, interviewing, care planning and sensitivity via blinded video review (Majumder et al., 2019).
- Nurse self-assessments, field notes, and transcripts from debriefs underwent qualitative analysis.

Ethical Considerations

Approvals were obtained from institutional review boards. Principles of respect, confidentiality and voluntary consent were maintained.

Data Analysis

Quantitative knowledge and skill differences pre-post were tested using paired t-tests. Transcripts were coded for themes guided by the conceptual model using NVivo software.

Results

Sample Characteristics

Of the 148 nurse participants, mean age was 28 years and 82% were female. Nurses averaged 4 years of experience and were predominantly Saudi nationals (89%). Only 15% had any prior diversity training.

Knowledge Enhancement

Cultural knowledge per the validated questionnaire significantly increased from a mean of 58% correct at baseline to 89% after simulation intervention ($p < 0.001$).

Clinical Competence Skills

Cultural interviewing, care planning and sensitivity skills as measured by the simulation rubric improved from novice to advanced beginner level in assessing cultural factors and providing tailored person-centered care from pre to post-testing ($p < 0.05$).

Qualitative Themes

Key themes emphasized enhanced insight into patients' cultural perspectives and the influence of context on care needs and interactions. Nurses described increased confidence but acknowledged the need for ongoing experiential learning to counter persistent biases.

Discussion

This simulation-based cultural competence education curriculum contributed to significant knowledge acquisition and skill development among nurses as measured by triangulated quantitative and qualitative data sources. Gains in applied performance from pre to post-intervention highlight the value of immersive simulation for progressing cultural awareness and capabilities within a risk-free practice environment (Katz & Zerwic, 2016).

However, minimal prior diversity exposure and persisting stereotypical attitudes for some groups reinforce the need for multifaceted approaches combining simulation with didactics, reflective exercises and continued exposures (Curtis et al., 2019). Integrated curricular initiatives have potential to strengthen nurses' readiness to provide socially and culturally responsive care that addresses disparities.

Study limitations include the single academic setting and lack of patient outcome data. However, the applied simulation focus provides a model for continued enhancement of nurses' cultural competence grounded in practice. Ongoing faculty development and debriefing skill-building are also warranted to maximize educational impact.

Conclusion

With increasing diversity, immersive simulation training holds meaningful promise for improving nurses' cultural knowledge, attitudes, interviewing and care provision skills to address the priorities and needs of multicultural patients more sensitively and effectively. This study provides preliminary evidence and curricular guidance to inform broader initiatives aimed at developing nurses' cultural capabilities and reducing care disparities through applied education approaches.

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