Assessing Perceptions of Nurse Educator Co-Facilitation in Simulation Sessions for Medical Students and Resident Physicians: A Novel Approach to Interprofessional Education

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Main Findings

- Nurse co-facilitation in simulation was positively received by medical students and emergency medicine residents.
- This novel model of IPE, the inclusion of nurse co-facilitators, presents a potential substitute for traditional IPE experiences.
- Of 69 participants, 81% of participants (n= 56) reported a positive impact on communication, teamwork, role clarity, and clinical relevance.
- Three key themes emerged from qualitative responses: nursing perspective, interprofessional collaboration, and clinical relevance.
- This novel model offers a streamlined IPE processes that may reduce burdens and logistical challenges and increase IPE opportunities.

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Poor communication between healthcare professionals, such as nurses and physicians, is a contributing factor in medical errors and remains a leading cause of death in the United States (Rodziewicz et al., 2024). Given this risk, improving collaboration among healthcare team members is critical, and interprofessional education (IPE) has demonstrated benefits for enhancing teamwork, communication, and patient outcomes (Cadet et al., 2024, Grace, 2020, Marion-Martins & Pinho, 2020, Saragih et al., 2024, Shuyi et al., 2024). Despite these benefits, the implementation and regularity of IPE face several persistent challenges including scheduling conflicts and logistical barriers (Cimino et al., 2022, Freeman et al., 2024). There remains a gap in the literature on strategies aimed at improving the frequency, consistency, and accessibility of IPE. The purpose of this quality improvement project is to offer a novel and more sustainable method for IPE as a means to improve communication, teamwork, and role clarity among healthcare workers.

Methods

Study Design

The design of this quality improvement project was modeled after the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, and Maintenance), which targets translating research into practice and ensuring the intervention is consistently implemented and sustained over time (Moran et al., 2024).

Setting and Participants

This study was conducted at a public university simulation center, accredited in education through the Society of Simulation in Healthcare, associated with a medical school and large hospital system in North Carolina.

Participants included university second-year medical students and emergency medicine physician residents, ranging from first to third year. This project did not meet the federal definition of human research, therefore it did not require Institutional Review Boards (IRB) review.

Implementation and Data Collection

Inclusion, facilitation, and participation of a nurse during a variety of educational medical simulations took place bi-weekly over a 12-week period. This project integrated an experienced nurse into previously established simulation-based medical simulation scenarios and assessed its perceived impact on communication, teamwork, and role clarity.

Data were gathered from cohorts of volunteer participants (n=72), with a new group taking part in each simulation session. At the end of each session, participants completed an 11-question post-intervention survey. The surveys included Likert-scale items and open-ended questions aimed at assessing participants' perceptions of the nurse's role as a co-facilitator in simulation sessions.

Results

Likert

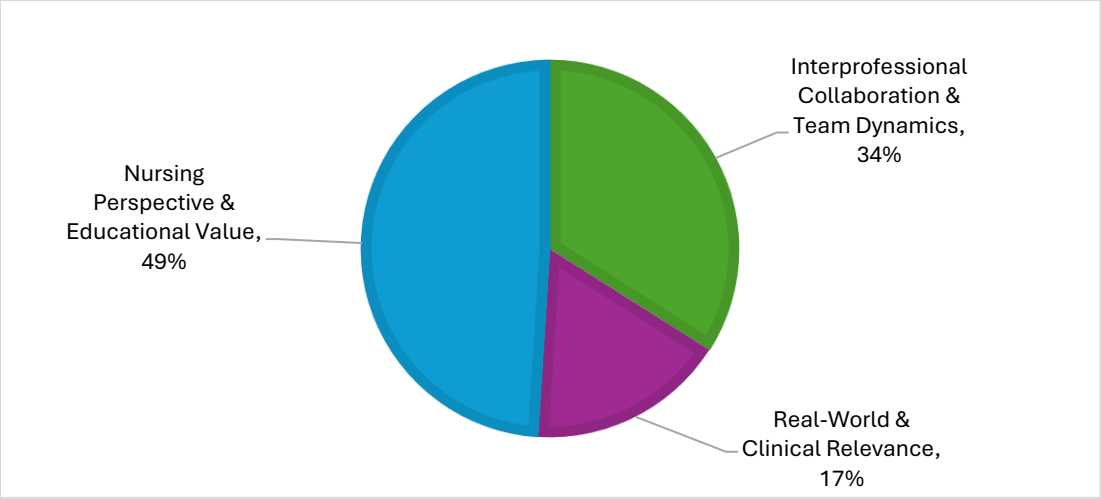
The Likert scale survey asked participants to rate 9 questions on a 5-point Likert rating the nurse co-facilitator's impact on communication, teamwork, role clarity, and clinical relevance after the implementation. Out of the 69 respondents, 81%, of the participants reported a positive impact on communication, teamwork, role clarity, and clinical relevance (N=56). There were (n=9) 'neutral' (n=4) 'disagree' and (n=0) 'strongly disagree' responses.

Free Response

The majority of participants (n=63), also provided written responses, revealing generally positive experiences with the implementation. Thematic analysis identified three primary themes: Nursing perspective & educational value (49%), interprofessional collaboration & team dynamics (34%), and real-world & clinical relevance (17%), with many responses touching on more than one of these themes. Themes are presented in Figure 1.

Figure 1

Common Themes of student learning experiences (n=63)



Strengths and Limitations

The findings from this quality improvement project suggest that integrating a nurse as a co-facilitator in medical simulation cases is not only feasible but also positively received by medical students and emergency physician residents. A significant limitation identified in the quality improvement project was the limited diversity among nurse participants serving as interprofessional nurse educators. Additionally, the lack of stronger methods such as control groups, pre-and-post surveys, and longitudinal studies limits the ability to state that this intervention is reliable method of IPE.

Conclusion

This project highlights the contributions nurses can make in patient care, education, and leadership. The recognition and utilization of nurses in diverse educational and leadership roles can improve teamwork and communication skills. By fostering better communication and collaboration among nurses and physicians the project addresses critical issues such as medical errors, healthcare disparities, and the efficiency of care delivery. Future research should explore the integration of this model across additional specialties and institutions, conduct longitudinal evaluations of its impact, and consider formal incorporation into medical and nursing education frameworks to foster a culture of collaboration from early training onward.

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