

Implementing Interactive Education to Increase Perceived Knowledge and Confidence of New Graduate Nurses in Critical Care Units

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Background & Review of Literature

- Newly graduated Registered Nurses (NGNs) often report a high-level of stress and anxiety upon transitioning into a professional and clinical nursing role.¹¹
- Despite 1:1 clinical orientation and hospital-wide Nurse Residency Programs (NRP), NGNs continue to report **low confidence when practicing independently**, which is attributed to knowledge gaps between theory and practice.^{11, 14, 21, 22}
- Knowledge gaps and low confidence levels among NGNs pose great concern for patient safety and outcomes.^{1, 3, 23}
- Two common themes emerge from the literature:
 - the need for more clinical skill exposure^{3, 9, 10, 12, 13}
 - confidence increases as skills, experience, and knowledge increases.^{1, 10}
- Literature recommends additional education opportunities, including 1:1 skills teaching and the implementation of NRP.^{3, 5, 11, 13, 14, 15, 19, 20}

Methods

Design: Longitudinal Quality Improvement Project

Setting: ICU and IMC units in an urban, tertiary medical center in Atlanta, GA

Measurement: Utilization of the Casey Fink Graduate Nurse Experience Survey⁶

- Comprised of 25 questions related to confidence; 1 specific question (CF17) utilized to assess perceived knowledge

Sample: 12 NGNs

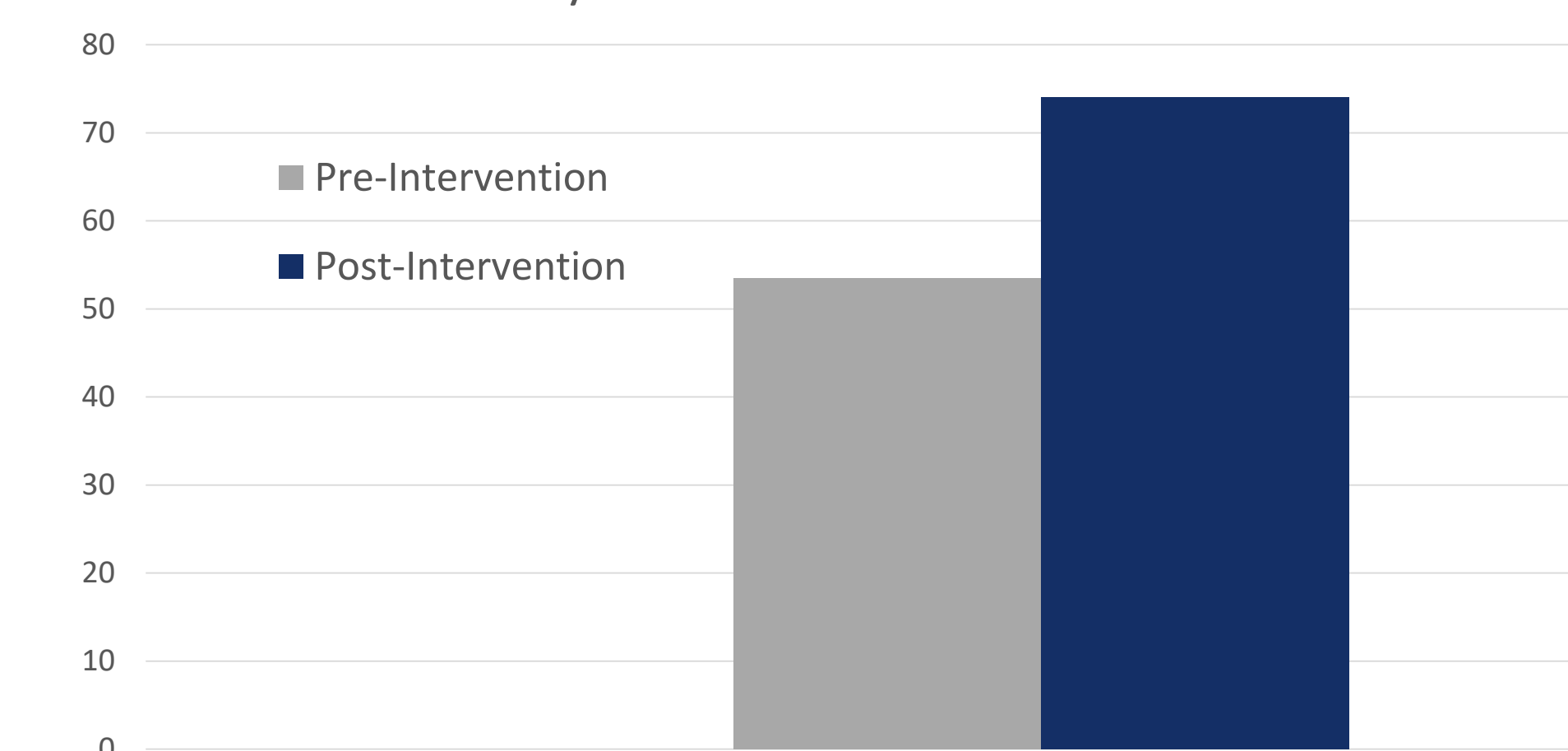
Table 1: Demographics of Critical Care NGN Participants

Demographic characteristics	(N = 12)
Age, mean (SD)	27 (6.2)
Gender, n (%)	
Male	5 (41.7)
Female	7 (58.3)
Ethnicity, n (%)	
Caucasian (White)	6 (50)
Black	6 (50)

Results

• Aim 1:

Figure 1: Casey Fink Graduate Nurse Experience Survey Summary Scores Pre- and Post-Intervention

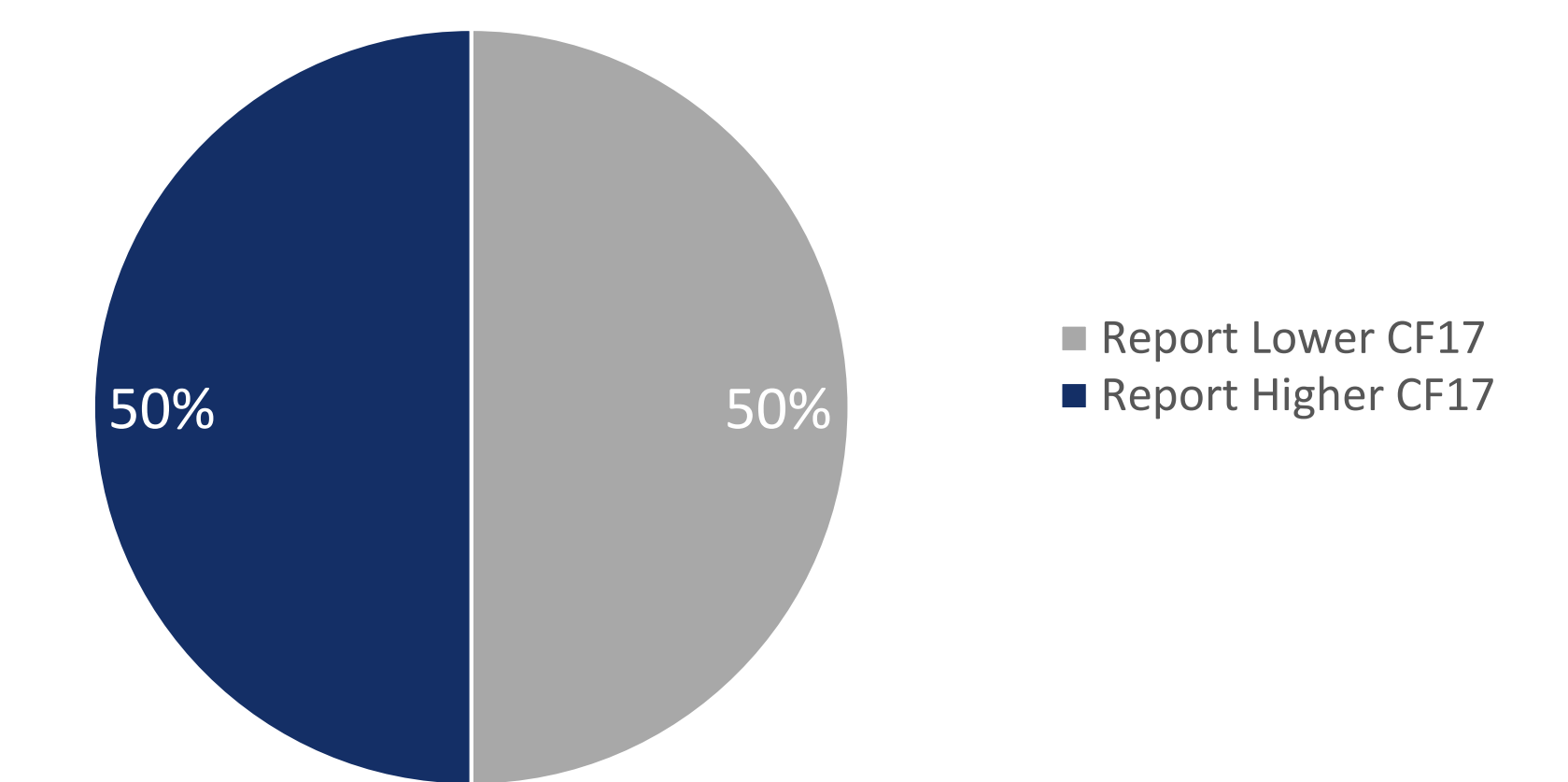


- All 12 NGN participants reported a higher summary score post-intervention.
- Results from a Wilcoxon Signed Rank Test (z-score -3.062; p-value 0.002) indicate that a NGN-interactive educational session for ICU and IMC units create a **statistically significant** increase in the perceived confidence level among ICU and IMC NGNs.

• Aim 2:

- Post-intervention, 50% of participants report feeling less likely to harm a patient due to limited knowledge.

Figure 2: Perceived Knowledge Level Post-Intervention



- Results from a Wilcoxon Signed Rank Test (z-score -1.89; p-value 0.59) indicate that the interactive session **does not statistically** improve perceived knowledge level.
- A **clinical improvement** is subjectively noted by participants, unit educators, and preceptors.

Purpose & Aims

- The purpose of the study is to explore if interactive NGN-focused education, compared to usual practice, improves perceived confidence and knowledge of critical (ICU) and intermediate care (IMC) NGNs.
- Aims:
 1. Assess perceived level of confidence among NGN participants pre- and post-intervention
 2. Assess perceived knowledge level of NGN participants pre- and post-intervention

Strengths & Limitations

- Strengths
 - Support from nursing educators, managers, and senior leadership
- Limitations
 - Expectation that confidence and knowledge will eventually improve despite intervention
 - Small Sample Size (N=12)
 - Inability to have all participants attend the same educational session

Conclusion & Dissemination

- By implementing this interactive education, NGNs can confidently complete their orientation and begin practicing independently with an increase in clinical confidence and knowledge, thus allowing for improved patient outcomes.
- Dissemination:
 - Results are disseminated to nursing leaders on participating units to modify current orientation practices to better educate NGNs as well as develop stronger clinicians.
- Sustainability:
 - Interactive sessions will resume in Summer/Fall 2020.