

# Improving New Graduate Nurses' Anxiety Surrounding Pediatric End-of-Life Care Using Simulation

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## Background

Caring for dying children can be a traumatic experience which may lead to nurse anxiety and burnout, fueled by a lack of end-of-life education

## Objective

To determine if a simulation-based educational program for new graduate nurses (NGN) in the critical care areas at an academic pediatric hospital can reduce anxiety regarding end-of-life (EOL) care.

## Intervention

NGNs participated in a 4-hour educational offering which included both a case study & a simulation component. Case studies provided NGNs with information to practice in the sim-lab. Both sims utilized live actors as parents/caregivers.

### Case Study 1

Reviewed withdrawal of life sustaining measures, the SPIKES method of difficult communication, EOL Symptom management, memory work, post mortem care, and hospital policy.

### Case Study 2

Reviewed death by neurologic basis & hospital policy, as well as briefly reiterated content reviewed in Case Study 1.



Above: NGNs were shown a video of a nurse performing EOL care prior to completing the pre-test STAI-Y1.

### Simulation 1

NGNs practiced explaining brain death testing and patient prognosis utilizing the SPIKES method of communication.

### Simulation 2

NGNs practiced participating in withdrawal of life sustaining treatment including palliative extubation, memory work, EOL symptom management, and post mortem care.

## Data Analyzation

### Pre-program anxiety

Mean: 48.25 (range 33-70)

**62.5% scored above 41**

### Post-program anxiety:

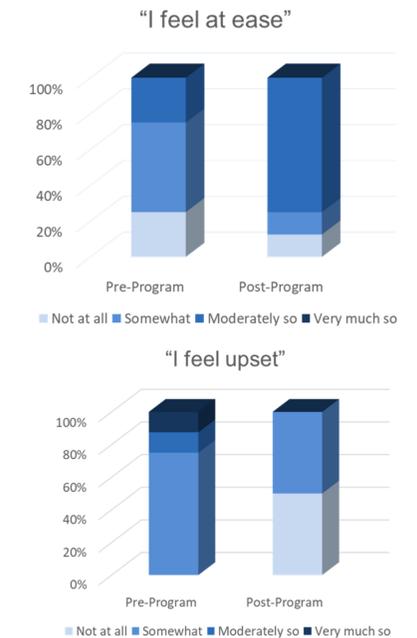
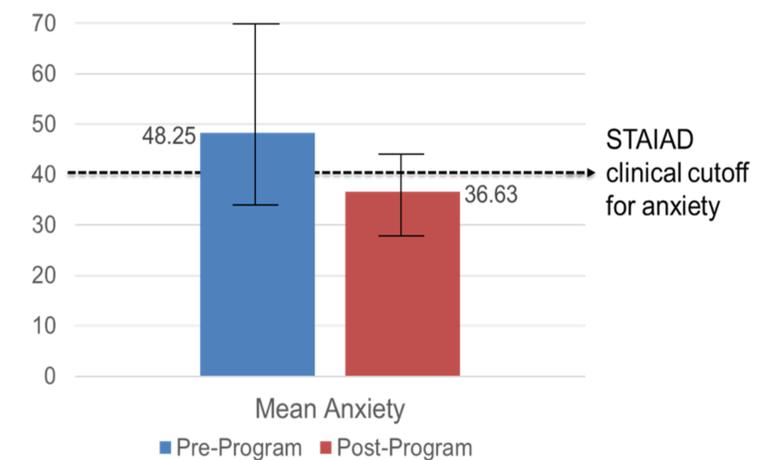
Mean 36.63 (range 28-44)

**37.5% scored above 41**

### Mean change:

11.62 points

**24.1% decrease**



## Practice Implications

- Educating NGNs to improve the end-of-life experience for themselves, patients, and families has great potential for positive impact.
- Utilizing simulation to enhance learner engagement in the unique and sensitive clinical circumstance of pediatric EOL may reduce workplace anxiety and lead to better nurse retention.

## Sustainability Plan

- Offering as an optional activity through annual ELNEC conference hosted at JHACH
- Potential for inclusion on a volunteer basis or as a computer-based training module
- Dissemination through publishing findings in an academic journal

## References

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- Ercan, I., Hafizoglu, S., Ozkaya, G., Kirli, S., Yalcintas, E., & Akaya, C. (2015). Examining cut-off values for the state-trait anxiety index. *Revista Argentina de Clinica Psicologica*, 24(2):143-148.
- Koutsimani, P., Montgomery, A., & Georganta, K. (2019). The relationship between burnout, depression, and anxiety: A systematic review and meta-analysis. *Frontiers in Psychology*, 10, 284. <https://doi.org/10.3389/fpsyg.2019.00284>
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## Data Collection

- NGN anxiety was measured utilizing the State Trait Anxiety Index (STAI) ©
  - STAI has ability to measure both state and trait anxiety. For purposes of this project, only state (situational) anxiety was measured (STAI-Y1).
  - Scores range from 20-80, 20 being anxiety-absent and 80 being highest possible anxiety. Cut-off for probable clinical anxiety on STAI-Y1 is a score of 41.
- NGNs filled out the STAI-Y1 as both the pre and post test.