



escola superior de
enfermagem
de coimbra

Honor Society of Nursing, Sigma Theta Tau International - 24th International Nursing Research Congress - Prague, Czech Republic

TRAINING PAEDIATRIC ADVANCED LIFE SUPPORT FOR NURSING STUDENTS USING SCENARIOS, AND LEARNING OUTCOMES IN AN EMERGENCY ROOM DURING THE CLINICAL PRACTICE

MEASURING PROCESS AND RESULTS

NURSING EDUCATION AND SIMULATION

**When /If we have a problem.....it's required to try a
solution**



**With increasing numbers of nursing students and
decreasing numbers of available clinical places, the use
of simulation is becoming an integral part of nursing
curriculum**

SimulationOnly because we need?

.....Is it a miracle??

NURSING EDUCATION AND SIMULATION

- **We intend to improve the quality of education and currently the simulation is seen asimportant...**
- **During simulation we can manage situations using a simulatornot a real person**
- **We can try and try,improving our performance with **safety...**this is impossible at a ward in a hospital**

Simulation? Yes, but it's absolutely **required** the **appraisal**the **costs** are high..number of students in simulation training are low, there are a lot of engaged teachers ...the technology is expensive....

■ Do the students **learn better**? What do they **feel**?

*We should **evaluate** the process.....and the **results***

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- **As part of a Project Group, we have developed at the Nursing School of Coimbra various types and levels of training courses in resuscitation, including Pediatric ALS. During these programs and after each practical simulated situations (scenario) we reflex all procedures – debriefing -**

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- **Debriefing is communally referred as a critical component of simulation experiences, providing the clinical staff with the opportunity to reflect and discuss their experience immediately after the immersive simulation experience**
- **Research has consistently demonstrated that debriefing is an essential component of simulation training, and has been highly rated by medical trainees, undergraduate and new-graduate nurses (Abrahamson et al., cited by Buckley & Gordon, 2011)**

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- Therefore, we're evaluating all process and results

Satisfaction....

Perception of efficacy during clinical practice



So we have planned an evaluation of master and bachelor students in clinical practice after a **Pediatric Advanced Life Support Program**

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Methods - Instruments

- We have used a semi-structured interview and selected the emergency units of Pediatric Hospital in Coimbra and a separated Pediatric emergency unit in a General Hospital.
- This evaluation is focused in **ALS** when and if the students have participated or observed emergency situations

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Methods - Design

Master students – Course of ALS during 3-4 full days, using scenarios; high fidelity simulation, and theoretical and practical assessment

Bachelor students – Curricular unit during seven weeks in the last semester of the nursing curriculum. We use scenarios and medium and/or high fidelity simulation.

The evaluation is theoretical and practical



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Methods

After that, they start the clinical practice in emergency rooms in teachings hospitals

The teacher and the tutor assess the students and put questions about ALS when and if the students have participated or observed critical situations

It is a difficult/long process because emergency situations do not exist every day....



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Methods - Participants

- **We interviewed 10 students**
 - 4 masters
 - 6 bachelors students
- **All students had been approved in the courses some weeks before**
- **All of them had observed and participated in emergency situations during the clinical practice**

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Methods – Critical Questions –

“You observed and participated in an emergency situation.

If you hadn't participated in the course, your

performance in ALS, during this clinical practice could

have been different. How different it could be??”

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Results – General (Non technical skills)

- **They confirmed the wide-ranging validity of training and the safety that they felt when have participated in emergency situations**
- **Specifically all algorithms are learned very well and to work in a team was realized as fundamental for the success in the field of resuscitation and in an emergency room**

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Results – General (Non technical skills)

- More confidence in an emergency situation
- Emphasis o the advantages of a structured thinking
- To be aware of the importance of a team and a strong leadership
- ▶ To be aware of an unstable child
- ▶ To sign in order to respond to an unstable child in a

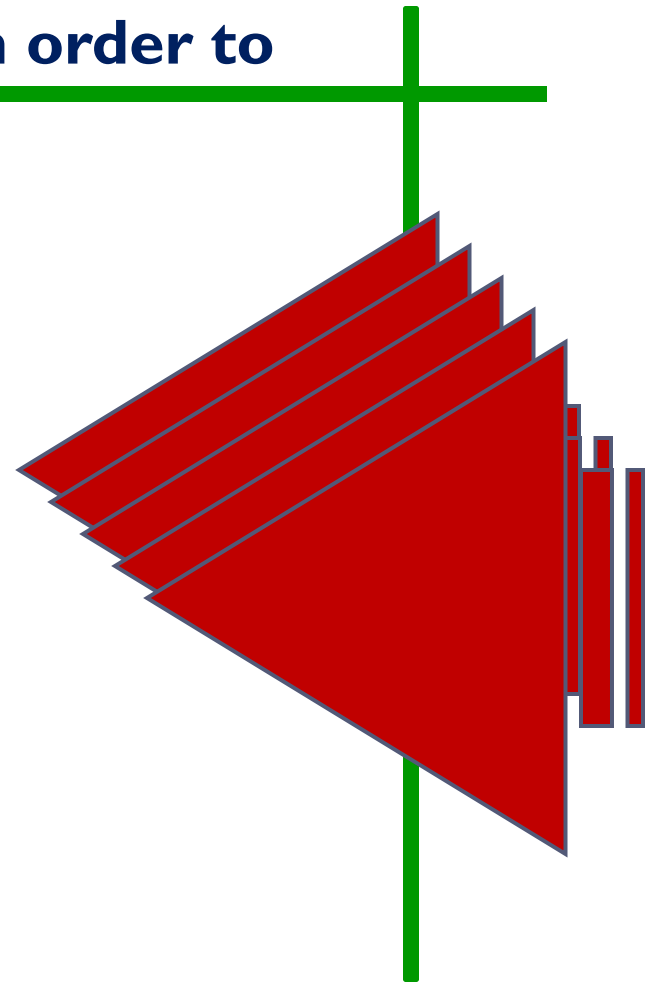
systematic way

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Technical skills

Easier and readiness assistance in order to

- Assess responsiveness
- Assess the airway
- Assess for breathing
- Assess circulation
- Manage the airway
- Manage breathing difficulties
- Manage circulation problems
- Manage the unresponsive child



Conclusions

The use of simulation in nursing education attempts to replicate the essential aspects of a clinical situation with the outcome focused on the ability of nursing staff to understand and manage similar situations in clinical settings (Alspach, cited by Buckley & Gordon, 2011).

Conclusions

One field of clinical nursing practice that may benefit from simulation is the assessment and early interventions necessary for patients with acutely deteriorating conditions is the emergency room or intensive care wards

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Conclusions

Furthermore, evidence is emerging that debriefing may be particularly important in fostering the non-technical skills associated with emergency response (Engel et al., cited by Buckley & Gordon, 2011) as observed in this study. This is a part of simulation training that requires further research.

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These findings suggest that immersive simulation improves nurses perception ability to respond to child clinical emergencies.

Furthermore, it emerge that technical and non-technical skills during patient clinical emergencies come into view to be equally important to nurses and relevant to pediatric nursing practice.

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Conclusions

In graduate students, the use of simulation may improve more clinically confident and capable nurses who can respond accurately and appropriately to children who require emergency responses and are appropriate to be developed in post-graduate nurse education.

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REFERENCES

Buckley ,Thomas; Gordon, Christopher. 2011. The effectiveness of high fidelity simulation on medical–surgical registered nurses' ability to recognise and respond to clinical emergencies. *Nurse Education Today* , 31 716–721

THANKYOU