

# Simulation as an educational method in nurse anaesthetist training

Björg Farup and Liv Skinnes, Oslo University Hospital, Centre of simulation  
Stein Nordsveen, Oslo University Hospital, Department of Anaesthesiology  
Bergsvein Grimsmo, Oslo and Akershus University College of Applied Sciences



## Objectives

- Students simulate anaesthesia-related patient situations that are relevant to the level of the program.
- All students have been through topics they should know before finishing their education.
- The students' clinical practice are strengthened.
- The students are prepared for both common and complex situations before they encounter them in practice.

## Introduction

To meet today's challenges in healthcare the use of simulation in nurse anaesthesia education has become a necessity. There is robust evidence about the efficacy of low-fidelity and high-fidelity simulation [1-3]. However, programs have limited resources to maximize the use of this technology. By cooperation between the University College and the Hospital, competencies and resources from both parts can be used to give the students an optimal programme for simulation.

## References

1. Issenberg S, McGaghie W, Petrusa E, Lee Gordon D, Scalese R. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. Medical Teacher [serial online]. January 2005;27(1):10-28.
2. Laschinger S, Medves J, Gambeta K, et al. Effectiveness of simulation on health profession students' knowledge, skills, confidence and satisfaction. International Journal Of Evidence-Based Healthcare [serial online]. September 2008;6(3):278-302.
3. Ricketts B. The role of simulation for learning within pre-registration nursing education - a literature review. Nurse Education Today [serial online]. October 2011;31(7):650-654.

Contact: Bergsvein.Grimsmo@hioa.no

## Method

### Plan and themes for the simulations

#### 1. semester

- Basic airway management
- Preparation and receipt of patient
- Induction of anaesthesia

#### 2. semester

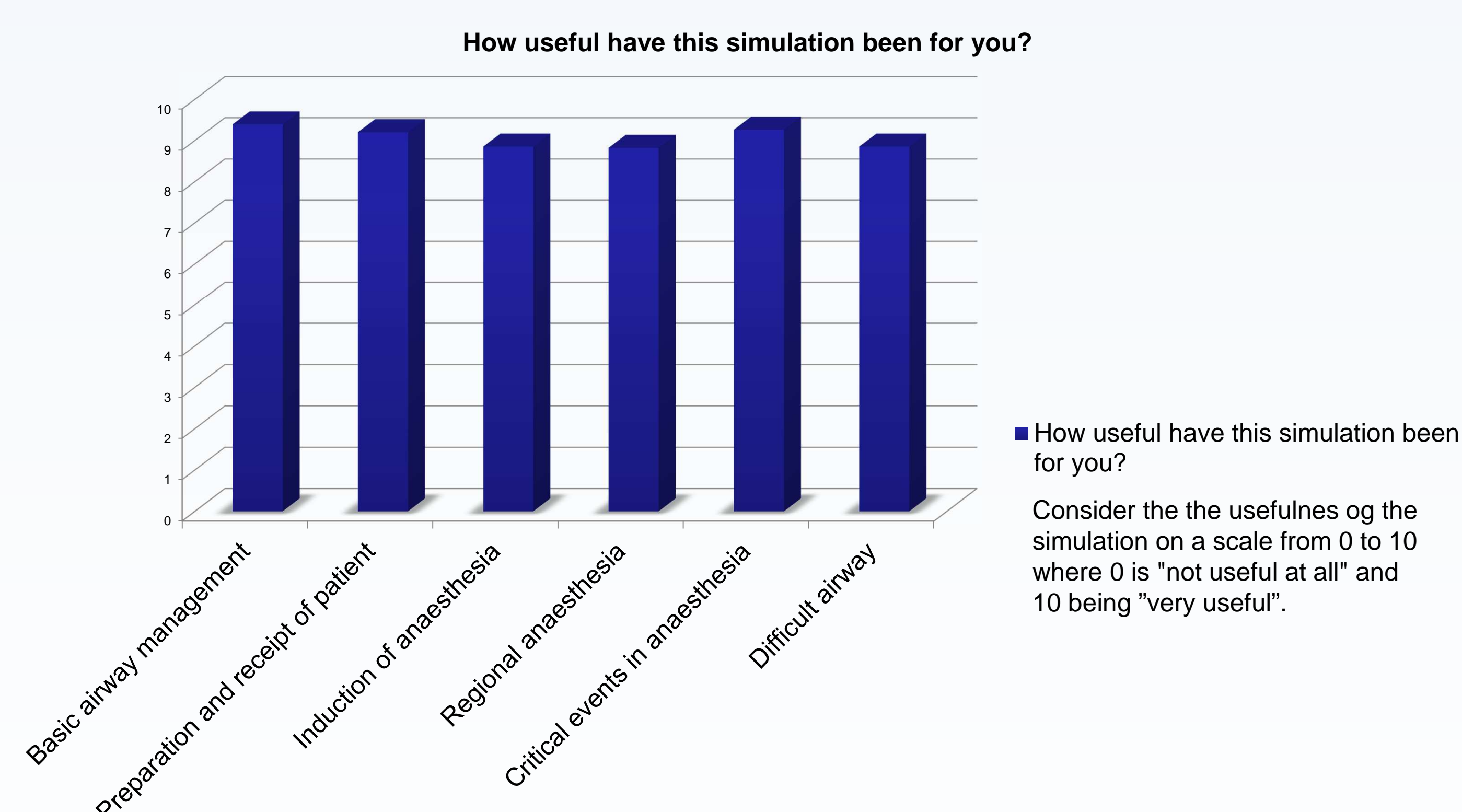
- Regional anaesthesia
- Inhalation anaesthesia
- Pediatric anaesthesia

#### 3. semester

- Critical events in anaesthesia
- Difficult airway
- Trauma patients (interdisciplinary training with medical students)

Faculty members involved have received approval for this project from their institutions. Nine themes for simulation training were identified. Learning outcomes were identified for each simulation theme. 3-4 scenarios were created for each theme. In the period from autumn 2010 to spring 2012, all scenarios have been tried at least once. The students have had three days of simulation each semester.

## Results



## Conclusions

We identified nine main themes for the simulations, and developed scenarios for all of these. All simulations were conducted at least once. Students evaluated both the implementation of simulation and the learning outcomes high. On open questions, many students answered that they wanted more simulation, and highlighted the debriefing as particularly valuable.