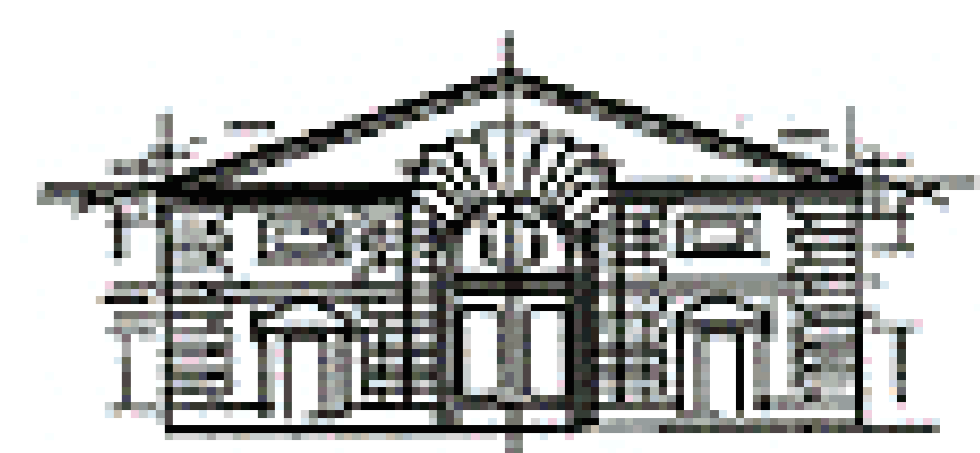


Effectiveness of high fidelity simulation on EM residents in France



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BACKGROUND

- Simulation in medicine increases safety by improving individual and collective practices (crisis resources management, communication, teamwork...). It has also reshaped educational paradigms.
- For many years, international guidelines recommend utilization of *simulation*-based education in emergency medicine.
- However, in Europe and in France, we have just recently started simulation-based training sessions for emergency residents by recreating vital emergency situations using basic *simulation manikins* or high fidelity and interactive manikins (human patient simulator Laerdal SimMan®).
- The objectives are to report our experience with the feasibility of a simulated-based learning for young emergency physicians and to investigate residents' experiences and perceptions of this new training.

METHOD

- In a large university hospital emergency department (120 000 emergency cases per year), located in the centre of Paris (France)
- Two training sessions (one at the beginning and one at the end of the residents' semester) using human patient simulators.
- SimMan® was used during all immersive scenarios where physiological variables were remotely controlled.
- Participants (n=15) were all emergency residents
- Self evaluation questionnaires were pertaining to participants' experience and ability to practice emergency procedures and perception of simulation.



RESULTS

- At the beginning of the semester, 44% of technical procedures were not mastered by the students versus 23% at the end of semester.
- Overall, at the end of the semester participants reported that the simulation workshops improved their performance and technical skills; 76% of technical skills had been utilized at least once by the participants vs. 55% at the beginning of the semester.
- 10 out of 15 residents were satisfied with the simulation experience where satisfaction was qualified as good or excellent (100%).
- All residents (100%) would change their practice in clinical emergencies after completion of the simulation training. Interactive part of the training and knowledge advancement were rated as useful aspects of the simulation workshops.



CONCLUSION

To our knowledge, this is the first assessment of satisfaction and skills advancement of emergency medicine residents in France.

Over the last decade, real-time medical simulation has expanded worldwide. In recent years, use of patient simulation has become a necessary learning tool in emergency medicine. Incorporating simulation training into residents' education curriculum increases student self-efficacy and staff satisfaction. In this context, it is important to extend such training to emergency staff to further develop nursing and medical collaboration and to include simulator sessions in the EM curriculum.

