

# HOW TO INCREASE KNOWLEDGE FROM LECTURES OF VITALY ENDANGERED PATIENT AND RESUSCITATION

## Mobile simulation training for rural providers

**FACTS** With simulations in healthcare we can successfully increase knowledge from lectures of vitally endangered patient and resuscitation (Kalischi, 2014, Kneebone, 2005, Cook idr, 2011; Eppich, Howard). Simulation is an excellent way for health care worker to train their skills in a safe environment.

**PROBLEM** But sadly, learning with simulations in healthcare is usually not available to professionals. Contributing factors to this problem are the lack of knowledge and poor equipment combined with high education costs and time shortage in medical teams.

**SOLUTION** We have developed a mobile simulation unit (»SIM mobile«) that enables all medical teams in primary healthcare access to modern simulation equipment. »SIM mobile« is a mobile education unit which brings state of the art, hands-on training, using high fidelity human patient simulators, to prehospital and hospital professionals. The »SIM mobile« is a 16 metres long trailer with two simulation spaces and high fidelity patient simulators that include: adults, children, infants, and pregnant mother / newborn. The simulators can talk, breathe, and bleed.

Participants use real medical and rescue equipment that rural providers use in the field or in clinical settings.

Each simulation can be captured using audio-visual recording systems included in each mobile simulation space. Upon completion of each scenario, students and staff review the teams' performance.

**RESEARCH** We have used »SIM mobile« to conduct simulations in over 20 different healthcare teams (N = 100) in Slovenia. At the end of training the participants filled out a question form about their previous experiences with use of simulations in healthcare, their need for this kind of education and availability of this kind of education. At the begining and in the end we have mesaured the intake and outtake knowledge of every individual. The simulation that was carried out was the management of acute medical emergency – anaphylaxis, resuscitation.

**RESULTS** All of the participants have said that the physical environment of »SIM mobile« was very comfortable and appropriate for training. 10 % of the participants have said that they have the access to simulation based learning in their workplace, but the equipment is too old and not realistic enough. Pre-and post-evaluation experiment of qualification indicates, that the level of knowledge in simulation is higher for 60 %.



Augmented reality

SIM mobile is a mobile education system, which brings state of the art, hands-on training, using high fidelity human patient simulators, to prehospital and hospital professionals throughout the Europe.



SIM mobile will provide standardized, high quality training to ensure consistent outcomes to rural EMS agencies and critical access hospital emergency rooms.



Debriefing room

Simulation room



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