Simulation-Based Training in Mountain Helicopter Emergency Medical Service: A Multidisciplinary Team Training Concept

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OBJECTIVE
Mountain helicopter rescue operations often confront crews with unique challenges in which even minor errors can result in dangerous situations. Simulation training provides a promising tool to train the management of complex multidisciplinary settings, thus reducing the occurrence of fatal errors and increasing the safety for both the patient and the helicopter emergency medical service (HEMS) crew.

METHODS
A simulation-based training, dedicated to mountain helicopter emergency medicine service, was developed and executed. We evaluated the impact of this training by the means of a pre- and posttraining self-assessment of 40 HEMS crewmembers.

RESULTS
Multidisciplinary simulation-based educational training in HEMS is feasible. There was a significant increase in self-assessed competence in safety-related items of human factors and team resource management. The highest gain of competence was demonstrated by a trend in the domain of structured decision making.

CONCLUSIONS
Interprofessional simulation-based team training could have the potential to impact patient outcomes and improve rescuer safety. Simulation trainings lead to a subjective increase of self-assuredness in the management of complex situations in a difficult working environment.