Why do we need more than technical and procedural competencies in the medical industry to improve patient safety?

Between 500 and 1,000 people die every year in plane crashes worldwide. Despite this seemingly high number, the number of preventable deaths annually as a result of medical errors is far greater. Patients die daily due to human errors committed by doctors, nurses and hospital staff. Why then is there such a great emphasis on rules, regulations and standardized simulations and trainings in the aviation industry, but not in the medical sector? How do we define safety and how can we continuously improve this notion? What similarities and differences exist between the aviation and medical industries and what can medical professionals learn from the established human factors and safety trainings already in place for pilots, flights attendants and non-flying staff. And what can aviation learn from medicine? A clear distinction is that trainings in aviation industry focus not only on technical and procedural competencies, but also interpersonal and personal skills. Interpersonal and personal skills must be strengthened for those working with or on patients and a safety culture needs to be introduced. This will result in proper error management, a positive working environment and ultimately less patients dying due to staff fatigue, a lack of assertiveness and hierarchy. Lufthansa Flight Training and the German Society of Orthopedic and Trauma Surgery (DGOU) have implemented a new trainings philosophy to strengthen interpersonal and personal competencies. From basic trainings to leadership trainings to assessments in the surgery room, this philosophy encompasses a broad implementation of human factors. The overarching goal is to make hospitals safer and to improve overall patient safety. During these training, strategies to combat complacency and fatigue are introduced, incidents are openly discussed and risk assessment is fine-tuned. Additionally, the trainings focus on improving communication within the team, providing decision making tools and making individuals aware of their own strength and weaknesses. This speech will emphasize the importance of human factors trainings for the medical sector. It will stress that human factor trainings must not only continue to develop in terms of subject matter and training methods, but continue to be an integral part of a hospital's strategy regardless of how safe current operations are. It will critically examine the current methods used in human factors trainings to see what needs to be done preemptively to adapt to the requirements of future generations of trainees and of the medical industry in general. It will highlight the importance of thinking creatively and outside of the box to push human factors trainings of the future and patient safety standards. New research results of these trainings and the effects will be presented.

Biography

Martin Egerth is a Product Manager of human factors training at Lufthansa Flight Training. As a Psychologist and Human Factors Expert, he manages Lufthansa’s entire portfolio of human factors and security trainings for the aviation industry and also for external industries. During his ten years at Lufthansa, he has developed, overseen and conducted trainings that have developed the skill sets of pilots, flights attendants and non-flying staff. From basic trainings, to recurrent trainings to management trainings for Lufthansa and external airlines, he has trained over 8,000 flying staff. He has also founded human factors working group comprised of 26 European and international airlines that meets annually to exchange CRM best practices, discuss how to avoid incidents and accidents, identify the influence that culture and safety culture has on CRM and develop CRM for the future. He holds Master’s degree in Psychology at University of Innsbruck and is currently pursuing his Doctorate degree.

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