DisasterSISM: A Multi-Level Blended Learning Program in Disaster Medicine for Medical Students

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**Introduction:** Disaster medicine has been identified as a fundamental discipline for health professionals. In Italy, the role of physicians during disaster response is officially recognized by the Italian Code of Medical Ethics and by the Ministry of Education. Nevertheless, few Italian medical schools include this discipline in their curricula.

**Aim:** With the aim of teaching basic knowledge of disaster medicine to Italian medical students, Research Center in Emergency and Disaster Medicine (CRIMEDIM) and Italian Medical Students’ Association (SISM) developed DisasterSISM, a nationwide training project in disaster medicine.

**Methods:** DisasterSISM consists of three courses: Basic, Advanced, and Train-of-Trainers (ToT). The Basic courses are managed by medical students who are trained during the one-week intense ToT. All courses are delivered using innovative training methodologies, such as e-learning, peer education, table-top exercises, and virtual reality simulations.

**Results:** From 2012 to 2018, a total of 122 courses (111 Basic, 5 Advanced, and 6 ToT) have been delivered. DisasterSISM reached 37 out of 45 Italian medical schools, training more than 2,500 students. A survey conducted after the end of each course showed that participants considered the knowledge in Disaster Medicine essential for their future profession, regardless of the specialty chosen. Students also expressed their appreciation about the blended-learning approach, with a predilection for virtual reality simulations. The comparison between the entrance and the final exam scores showed a significant increase in knowledge.

**Discussion:** In six years, DisasterSISM reached the majority of Italian medical schools, providing disaster medicine knowledge to hundreds of undergraduates. Considering the fast growth and diffusion of the project, the significant increase of knowledge, and the positive feedback received from participants, we suggest that the DisasterSISM model be implemented in other countries to widely disseminate information about prevention and disaster preparedness among medical students and health professionals.

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Exploring the Preparedness of Student Paramedics for the Mental Health Challenges of the Paramedic Profession

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**Introduction:** The mental health challenges encountered by paramedics have received much attention in recent years. This attention has particularly focused on high rates of stress, depression, anxiety, and post-traumatic stress disorder. This heightened awareness of the high incidence of mental illness, which has at times tragically resulted in the suicide of serving and former paramedics, is stimulating the address of mental health within the paramedic profession. It is now time to call on paramedic educators to prepare student paramedics for the mental health challenges associated with a career in the emergency medical services.

**Aim:** To explore the preparedness of student paramedics for the mental health challenges of the paramedic profession and identify the coping strategies used by veteran paramedics to successfully meet these challenges.

**Methods:** Twenty semi-structured interviews with veteran paramedics from Australia and New Zealand were conducted.

**Results:** Advice from veteran paramedics was comprised of three key themes: support, health, and the profession.

**Discussion:** The findings of the study indicate that the preparation of student paramedics for the mental health challenges of the paramedic profession throughout the undergraduate curriculum could be advantageous. The advice offered by veteran paramedics can be included within undergraduate paramedic curricula and delivered by sharing the personal experiences of the veteran paramedics. These experiences are highly credible and sharing them offers an opportunity for veterans to contribute positively to the future of paramedicine. Guidelines for their inclusion in the undergraduate paramedic curriculum should be prepared to facilitate knowledge translation and to encourage the development of conscious coping strategies by student paramedics during their learning phase. Further research is needed to raise awareness in this area, with a specific focus on preparing paramedic students to cope with mental health challenges related to undergraduate degree programs, and how they feel about commencing their career as a paramedic.