Emergency medicine training: Is undergraduate training sufficient for the Swiss health-care system?

The study by Saxer et al. in this issue of SMW [1] evaluates and compares the educational impact of two undergraduate training systems for emergency medicine in Switzerland. A 4-week training program is comparable to the ARMY 9-week officer program. Both seem to be effective in improving trainee's performances regarding knowledge and skills.

If assessed in detail, however, very interesting observations can be made: While standardized oral examinations revealed a statistically significant and probably relevant knowledge improvement in the primary survey, for the immediate treatment, and the physical examination in both training systems, no improvement in diagnostic competence was shown in either program. Surprisingly, the university based program even revealed a significant deterioration in this category, while a 4% deterioration in the ARMY program was insignificant. CPR skills, on the other hand, improved in both programs by a significant and relevant margin of 15% to 19%.

How can these differences be explained? Skills, such as basic life support, can obviously be taught in relatively short time. Knowledge about examination, treatment, and primary survey seem to be comparable to these basic skills regarding the impact of short training.

The authors conclude that both programs were effective, and that trainees attained a satisfactory performance level in knowledge and technical skills. Cautiously, they mention that "it is not yet clear whether they are adequately prepared ... to function in the context of any specialty residency ...". This, however, should be the goal of any emergency medicine training. Diagnostic skills are of utmost importance in emergency medicine. In Switzerland, as in many other European countries, the first postgraduate year is often spent in Emergency Rooms, in order to improve these obviously incomplete diagnostic skills. These junior doctors are responsible, especially at night and during weekends, for patients presenting to hospitals in emergency situations.

The authors conclude that "once the basic emergency competencies required of beginner residents and medical officers are defined and established, the changes to training programs ... can be more appropriately determined".

Just in time for this issue of SMW, the Swiss Medical Association (FMH) has formally accepted the training for emergency medicine in the form of a supra-specialty. Is this the answer to the question above? Certainly not. There is still a big difference between undergraduate emergency medicine training and "on the job" graduate training. However, these standards are set in Switzerland. For the first time, there is an agreement on how to define emergency medicine, how to define an Emergency Room or Department, and the level for graduate training in emergency medicine in the form of very detailed learning objectives.

These standards will help to define the goals for undergraduate training. As the contribution of Saxer et. al in this issue shows, even elaborate university programs or ARMY programs in favour of improving emergency medicine skills and knowledge do not reach the goal of generating sufficiently trained beginner residents capable of taking responsibility for emergency patients – especially due to a lack of diagnostic competence. Patient organisations and health care officials have therefore a longstanding interest in improving training programs in this field.

The inauguration of emergency medicine as a supra-specialty in addition to surgery, internal medicine, family medicine, anaesthesiology, and intensive care in Switzerland will certainly help universities to define and establish higher undergraduate emergency competencies. Unfortunately, the Geneva and the ARMY program, though lacking an impact on diagnostic skills, are probably by far the best undergraduate training in this country. Other universities could take the present study as a call for improvement of their undergraduate training in emergency medicine.

1 Saxer T, Duperrex O, Vermeulen B, Vu Nu V. Emergency medicine training: A prospective, comparative study of an undergraduate clinical clerkship and an army programme. Swiss Med Wkly. 2009;139(29–30):423–9.

Correspondence: Prof. Dr. Roland Bingisser Notfallstation Universitätsspital Basel Petersgraben 4 CH-4031 Basel