

The role of emergency medical service in the emergency medical service system in Poland

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Received: 2012.03.12 • Accepted: 2012.09.11 • Published: 2012.09.28

Summary:

Fast and competent medical care in life-threatening emergencies can save lives, reduce treatment time and minimize the need for further rehabilitation. In addition to standardizing the rescue system, it is important to create highly specialized medical personnel: training of doctors and nurses in the emergency medical service, and — still a new profession — paramedic. The article is an attempt to develop these problems systematically.

Key words: Emergency medical service, training of paramedics, training programme of paramedics, paramedics qualifications, clinical subjects, rescue.

Since the academic year 2000/2001 emergency medical training as a three-year undergraduate studies in Public Health Department has been taken in Medical Universities in Poland.

In the academic year 2003/2004 the first graduates of a completely new profession left the institutions of higher education.

Young people with a diploma of higher education, educated in the field of live saving, eager to work, began to look for employment in a new occupation.

However, the first problem emerged. New organizational units, specially prepared for use in emergency, a new team of specialists, highly specialized equipment — all require staff of a new era. No legal specification of rights is the main problem of new medical services. It normalizes the standards of medical equipment of ambulances and Hospital Emergency Wards, but neither

specifies the powers of a paramedic, nor takes the diverse education of the staff into consideration.

How can work be performed if there is no specific statutory rights and obligations for the paramedic? The key question remains unanswered: whether the paramedic is a nurse, a doctor, or an orderlies only?

Qualified paramedics in Poland

Fast and competent medical care in life-threatening conditions — either in traffic accidents, or in emergency cases — allows life-saving, reducing treatment time and minimizing the need for further rehabilitation.

In addition to standardizing the emergency medical service it is important to create highly specialized medical personnel: training of doctors and nurses in the specialty of emergency medicine, and — still a new profession — paramedic.

The Act of Law on National Emergency Medical Service for the first time specifies qualifications of the paramedic and defines it as the rightful profession. It also shows the qualification requirements, including:

- 1) gaining a university degree in the field of professional emergency medical services;
- 2) gaining a diploma abroad recognized in the country as equivalent;
- 3) the right to perform a paramedic profession is recognized to people who had gained the title of paramedic in post-secondary medical schools before 30 September 2006, on the existing rules;
- 4) having full capacity to enter into legal transactions [19].

The Paramedic is a profession of an assistant in relation to the medical profession.

The legislator has entrusted the minister responsible for health issues to determine the scope of medical emergency actions that may be taken by paramedic independently or under the supervision of a doctor. Neither the regulation of the Minister has appeared, nor there is systematization of the rights and duties of the paramedics.

In Poland the profession remains a matter of much controversy, as it has not been specified what are the powers of the paramedics, and if they are not competition for nursing and medical posts.

Implementation of Medical Rescue System is expensive, which has been the Subject of interest of the Polish governments so far, despite the fact that the number of young people is forced to change their profession waiting for the legislation rather than to practice the learned profession in the course of free state-funded studies.

Gender is also a problem among the paramedics. The study direction involves mainly women, despite being considered as a profession (stereotyped) for men, because it is associated with physical exertion associated with:

- 1) carrying victims;
- 2) walking on floors carrying heavy life-saving equipment;
- 3) performing activities in extreme conditions, etc.

Was that the purpose of education in this direction? These questions bother not only the interested parties — paramedics, but also employers who — so far — prefer to employ tall men — “to carry” and not manually able college women. It is necessary to look at:

- 1) Law on State Emergency Medical Services (Państwowe Ratownictwo Medyczne – PRM);
- 2) the planned role of the paramedic in Emergency Medical System (System Ratownictwa Medycznego – SRM);
- 3) Emergency Medical System alone.

Polish plans need to be compared in this respect with what already works in the European Union — where the systems are implemented and has run smoothly for years. This is not a simple task, because there are not final legislative solutions in Poland.

There are no uniform guidelines applied in the European Union. However, there are some similarities between the member states, but there is no uniform program for all EU Member States.

Education of paramedics in Poland

The training program and the competence of licensed paramedic is based on Anglo-American EMS, adapted to the realities of the functioning of the Polish education and health care.

Teaching has taken the form of undergraduate higher education, carried out by the Medical Academies or secondary Medical Schools. The “Integrated Medical Rescue” started in November 1999, through the creation of organizational structures:

- Hospital Emergency Wards;
- preparation of specialized medical staff to fill them.

This situation has created a new task for the medical education, to be more precisely for the Medical Academies, the aim of which was to educate new, highly specialized team of employees for the purpose of emergency medicine, among them a new professional group—paramedics.

In the European countries, the profession has a hierarchy qualification, the highest level of which — paramedic — has extensive powers to perform advanced medical procedures.

In Poland, till 2006 paramedics had been educated in post-secondary Medical Schools in a four-term education system, ending with gaining a paramedic diploma.

Curriculum for paramedics in Poland

Since 2001, the paramedics started to be trained in full-time studies for three years at the Medical Academy. The curriculum was divided into 6 terms, 15 weeks of teaching. The number of classes was specified to be 2481, required to complete the curriculum of emergency medicine during undergraduate studies.

The program includes the following subjects:

- 1) basic general, medical subjects;
- 2) interdisciplinary subjects;
- 3) clinical subjects;
- 4) holiday practices.

Basic general, medical subjects in undergraduate studies

The purpose of general medical teaching is to provide the necessary knowledge of the structure and functioning of the human body. It is the basis for understanding the pathophysiology of life-threatening conditions and actions taken to rescue.

The number of hours for general, medical subjects, such as normal anatomy, physiology, pathophysiology, pharmacology, which cover I and II terms – is specified to be 470 hours.

Interdisciplinary subjects in undergraduate studies

Interdisciplinary subjects teaching such as: ethics, psychology and physical education, is designed to broaden students' knowledge about the illness of individuals and social groups in stressful and extreme situations. Students are acquainted with psychosocial determinants of illness and ethical principles. This knowledge is to help them in the future contact with the victims, their families and witnesses of the events.

Students have the opportunity to increase the number of hours of physical education: from 60 to 120, in the form of elective courses, which ensures the possibility of future paramedics efficient provision of effective support and improve physical condition. Interdisciplinary subjects are taught in terms: from I to IV, inclusive, and the number of hours specified to be 234.

Clinical subjects in undergraduate studies

Teaching clinical subjects is designed to provide knowledge about the most common diseases that may cause life-threatening conditions.

Students learn the clinical picture in the discussed group of diseases, methods of diagnosis and detailed procedures at the scene and during transport to the hospital. They also gain general knowledge on further specialist treatment and rehabilitation of patients.

Clinical subjects are taught from III to VI term, and the number of teaching hours is 1777.

Teaching of Anesthesia and Intensive Therapy include:

- the treatment of the patient during general anesthesia and conduction anaesthesia in operated patients;
- familiarizing with the construction and operation of the apparatus to anesthesia;
- acquisition of knowledge about the safety of patients during anesthesia and surgery;
- monitoring of the patient during awakening from anesthesia and post-operative — pain management at these moments, and principles of treatment with fluids.

Practical classes are held in the halls:

- 1) operational;
- 2) awakenings;
- 3) postoperative.

The teaching of first medical aid covers:

- 1) implementation – during practical classes — Basic Life Support standards (BLS), the basic life-sustaining activities of the patient and Advance Life Support (ALS) — cardiopulmonary resuscitation — using respiratory medicines;
- 2) manual skills in setting up vein access;
- 3) intatracheal intubation;
- 4) performing the transfusion of fluids;

5) manual and automatic defibrillation.

Holiday practice during the study

Practices aimed at improving the knowledge and its use, as well as the practical skills of students in terms of the Rescue and Emergency Department and other rescue units.

Practice also allows students to gain an elementary experience, required for the paramedic to work independently. The number of hours of practice is specified to be 320.

Professional development for paramedics

The curriculum is completed with the diploma gaining by a paramedic. Until now, there the possibility of supplementing licensed paramedic for the master's degree has not been created.

The situation is due to the lack of legal regulation of paramedic responsibilities and actions that can be performed independently, medicines that may be given to the patient as a sudden threat to life or health.

The problem of professional development opportunities and obtaining a Bachelor's degree in the so-called. "Bridging studies" for medical students of post-secondary studies, or any variation of responsibilities due to the level of education has not been solved so far.

Opportunities to broaden the knowledge and skills

In some districts series of trainings are organized, the aim of which is to broaden the knowledge of emergency medical services.

Among the activities of this type the following can be mentioned:

- courses and training in first aid;
- competitions, Olympic games, contests and championships in the field of emergency medicine (e.g. in May 2006 the qualification for Polish championship in emergency care was held in Augustow, in the championships 37 emergency medical teams participated);
- exercises of the integrated system;
- media actions such as: "Save Life" or the TV Programme "Safe Channel One", "Injuries", "Accidents";
- information in the press.



Figure 1: Emergency medical service show, Augustow, 2006.



Figure 2: Emergency medical service show, Augustow, 2006.



Figure 3: Emergency medical service show, Augustow, 2006.

Planned changes in the draft act of 8 September 2006

The draft act on the State Emergency Medical Services, the legislature normalize actions that can be performed by the paramedic.

The duties of the paramedic shall include:

- 1) protection of persons in the scene, and take actions to avoid any increase in the number of victims of the event;
- 2) assessment of the health of people in health and life threatening situations, and taking medical rescue actions;
- 3) transporting the victim to the emergency department;
- 4) communication and psychological support for a person of sudden deterioration of health;
- 5) organizing and Conducting training on first aid (BLS).

The detailed scope of medical services carried out by the paramedic under or without a doctor supervision is specified by the Minister of Health. The scope of activities performed by the paramedic concerning the first aid are the following:

- 1) cardiopulmonary resuscitation – instrumental free and instrumental, with the oxygen application, and the use of automated defibrillators (as indicated);
- 2) stopping external bleeding and wounds dressing;
- 3) immobilization of fractures as well as bone and joint injuries;

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- 4) protection against hypothermia or overheating;
- 5) conducting preliminary anti-shock actions through proper placement of the victim;
- 6) the use of passive oxygen therapy;
- 7) evacuation from the scene;
- 8) conducting initial medical segregation (triage) [6].

The Health System (System Ochrony Zdrowia -SOZ)

The aim of the system is to ensure efficient and effective implementation of the tasks of the state, involving the taking of medical emergency response to any person located in the state of danger to life or health, and in particular:

- 1) providing immediate assistance call using the means of communication,
- 2) immediate arrival of the emergency medical team at the scene,
- 3) immediate taking appropriate medical rescue actions at the scene,
- 4) providing an appropriate transport to the needs and circumstances of the patient,
- 5) providing immediate transport to the nearest Hospital Emergency Department (SOR) or Emergency Room (ER).

Acknowledgements:

Original article previously published in the Polish language in *Wojskowa Farmacja i Medycyna*.

