

# Emergency medicine in the Netherlands: a short history provides a solid basis for future challenges

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## Introduction

In 2009, medical training in emergency medicine in the Netherlands was approved by the Medical Specialist Registration Committee (MSRC) of the Royal Dutch Society for Medicine (KNMG) [1]. Emergency medicine is therefore a young and newly independent discipline. Even taking into account the initiation period during the previous years, this is still the case. What were the reasons and objectives to train physicians working in the emergency department (ED) back then? What role does the emergency physician have at the moment? What are the future challenges for emergency physicians in the Netherlands? In this article, we review the current situation and speculate about the future of our specialty.

## A short history

'Emergency medicine; a new discipline urgently needed' was published in the Netherlands Journal of Medicine in 1990 [2]. It presented the conclusions of the Belgium–Dutch workshop on emergency medicine, an initiative of Joost Bierens and Herman Deloof, both anaesthesiologists, held in Pettenberg, Belgium, on the 7th and 8th of December in 1989. At that time, in the Netherlands, this first known and documented initiative lacked embedding and could not count on sufficient support. Although stranded, it has probably contributed to the creation of awareness.

In 1999, trauma surgeon Jan Luitse and pioneer physician in emergency practice Gos de Vries organized the conference 'Emergency Medicine, who cares?' in Amsterdam. That same year, the Netherlands Society of Emergency Physicians (NSEP) was founded. The year 1999 can therefore be seen as a starting point for the new style of emergency medicine in the Netherlands. Other links in the emergency medicine chain were already forming and developing during that time. Although the emergency medicine departments were becoming more complex, the training of specialized medical staff in these departments was being overlooked. At this time, physicians with little or no experience staffed the ED. There was no professional training or nationwide standard of care. Meanwhile, physicians, managers and politicians started to realise that

through reorganising the provision of acute medical care, its delivery in the ED could be improved [3,4]. In 2000, four teaching hospitals started the first emergency medicine training in the Netherlands. Two years later, the first university hospital joined this group. In the following years, more hospitals joined and in 2004, the Stichting Opleiding Spoedeisende Geneeskunde, a foundation to secure and standardize the emergency medicine training programme, was founded. Since 2008, there has been a uniform, nationwide emergency medicine training programme, and since 2009, emergency medicine has been recognized as an area of special interest by the MSRC [1,5]. Since then, the quality and uniformity of emergency medicine training has been overseen by the MSRC. The Stichting Opleiding Spoedeisende Geneeskunde had now reached its goals and was therefore abolished. Nowadays, there are many Dutch EDs with an emergency physician as the medical manager and the same applies for the Emergency Medical Services. In 2011, for the first time, a Dutch emergency physician was appointed as a lecturer in emergency medicine, and also, the first professor in emergency medicine was appointed to the Erasmus University in Rotterdam.

## The current state of affairs

### International emergency medicine

In 1993, the European Union created a directive to facilitate harmonisation of training and mutual recognition of qualifications, commonly referred to as the 'Doctors Directive'. The directive requires that the period of training for emergency medicine should be a minimum of 5 years. Then emergency medicine was listed under the name 'Accident and Emergency Medicine' only for the UK and Ireland. The last Directive was published in 2006, in which the specialty includes nine countries: UK, Ireland, Czech Republic, Hungary, Malta, Slovakia, Romania, Bulgaria and Poland. Since 2006, four other European countries have activated the basic specialty (Italy, Luxembourg, Slovenia and Belgium), but are not yet listed in the Doctors Directive.

Recently (October 2011), the proposal to create a section of emergency medicine was formally approved by the European Union Medical Specialists council. This means

that emergency medicine has acquired the same status as other major clinical disciplines in Europe. Outside of Europe, emergency medicine is practised as a primary medical specialty currently in over 40 countries.

**Netherlands Society of Emergency Physicians policy statement (<http://www.nvsha.nl>)**

The mission of the NSEP is to advance and secure the quality and development of emergency medicine in the Netherlands. The NSEP is a scientific society that protects the interests of emergency physicians and emergency medicine specialist trainees. In July 2011, there were over 240 emergency physicians, practising in 66% (66/99) of Dutch EDs (Fig. 1). The number of emergency physicians working in each ED varied from one to 11. Six departments, including one university

hospital, had already realized a 24/7 presence of staff 365 days a year. In June 2011, the NSEP organised its fifth annual 3-day scientific meeting. The NSEP participates actively in international umbrella organisations, such as the European Society for Emergency Medicine and the International Federation for Emergency Medicine. Representatives from the NSEP also sit on several national committees concerned with emergency medicine.

**Emergency medicine training programme**

There are 27 teaching hospitals in which 170 emergency medicine specialist trainees participate in a 3-year programme. Half of the training time is spent in the ED. The other half is spent in other departments within the teaching hospital or with associated agencies outside

Fig. 1



Fig. 1 (Continued)



(a and b) Emergency departments in the Netherlands with and without appointed emergency physicians.

the hospital. Mandatory components of the training are intensive care medicine, anaesthesiology, cardiology, paediatrics, family medicine and the Emergency Medical

Services. Training is delivered through teaching at the local hospital and also regionally or nationally. Several additional qualifications are compulsory (Advanced Life

Support, Advanced Trauma Life Support, Advanced Pediatric Life Support), and the trainees participate annually in an emergency medicine examination.

### **The work of the emergency physicians in the emergency department**

These departments have become complex acute-care departments. Over the last 20–30 years, the number of EDs has been reduced substantially. In contrast, the number of patients has increased over this time. Along with a change in the quantity of patients, the type of patients has changed. Patients are older, more severely ill and have more comorbidity. Possibilities in medicine have increased, as have the expectations of patients, and there is now more legislation and monitoring by healthcare authorities [3,6,7]. During the last 40 years, the spectrum of morbidity has shifted from communicable diseases to noncommunicable diseases, such as cancer, cardiovascular diseases and trauma [8]. As a result of all these changes, the working practices of a modern ED are significantly different from that of 30, 20, or even 10 years ago. Major changes are expected in the (near) future. The ED will need to be able to adjust to the inevitable rapid changes of medicine and be ‘future proof’. This will require both a professional emergency nursing staff and professional management of a dedicated medical staff. We feel emergency physicians are most suited for this job because like no other medical professional, they:

- (1) bring continuity to ED staffing and form a team with ED nurses, allied healthcare workers and support staff;
- (2) facilitate an integral approach to ED processes;
- (3) are familiar with national legislation and regional protocols;
- (4) are able to think out of the specialty-focused box and take care of undifferentiated (complex) morbidity;
- (5) are present in the ED and are available for teaching and supervision of specialist trainees, newly qualified doctors, physicians’ assistants and medical students;
- (6) can be a liaison between medical specialists, Emergency Medical Services and the general practitioner;
- (7) can work efficiently through working independently in diagnostics and treatment;
- (8) offer new diagnostic or treatment modalities to the ED (e.g. ultrasound, peripheral nerve blocks and procedural sedation).

### **Future challenges**

In the Netherlands, quality of care, patient safety, cost reduction and accessibility are the main driving forces for the regionalisation of healthcare, and, therefore, emergency care is an integral discipline [9]. Also, emergency medicine is recognized as an independent profession, but it does not have a full status of a basic specialty yet. Over the coming years, emergency physicians throughout the

Netherlands will face a growing number of challenges as they strive to develop academically and improve the delivery of patient care.

### **Continuity of care delivered by speciality physicians**

One of the unique aspects of the ED is that the majority of its services are available regardless of the time of day. The work of an emergency physician is not constrained to clinic or theatre schedules. Continuity of care delivered by specialty physicians is, apart from the individual role of each emergency physician, an important prerequisite for realising maximal added value for the emergency physician [10]. Sufficient staffing levels are needed to manage an ED and develop emergency medicine. A hospital wishing to excel in emergency will need to address the issue of the availability of specialist staff in the ED, so that a full acute-care service can be delivered at any time of the day.

### **Emergency medicine residency**

Let there be no misunderstanding about this point: the goal of a 5-year training period in the Netherlands, as for all European countries, must be achieved. According to European regulation, a training period of at least 5 years is necessary for sufficient medical knowledge for a complex specialty such as emergency medicine [11]. In 2008, when the 3-year programme was accepted, the initial goal of a 5-year programme could not be achieved, mainly for political reasons. Apart from extending the period of the training, the requirements for teaching hospitals will also have to be raised. Over the next decade, improvements in delivery of training will develop as a result of more Dutch emergency physicians becoming directors of training and scientific programmes. The regionalisation of training programmes will be inevitable with a 5-year training period and this will also require training to be delivered and managed in a way different from that at present. We envisage that the number of speciality training posts in emergency medicine available each year in the Netherlands (59 in 2012) will probably be reduced in the near future. This will also be accompanied by a reduction in the number of teaching hospitals in the Netherlands. Compared with the 140 teaching hospitals in the entire US, 27 teaching hospitals in a small country like the Netherlands is excessive. Finally, emergency medicine should be an integral subject in the medical school curriculum and there should be a compulsory placement in the ED for all medical students. This will then result in an improvement in the quality of subsequent applicants for specialist trainee posts. With less posts available, the competition among applicants will become greater and entry requirements will become more rigorous.

### **Deepening core competencies in emergency medicine**

This is a major challenge to emergency physicians in the Netherlands. Dutch emergency physicians need to work together to bring their practices in line with international standards. We see this is as mostly the responsibility of

the emergency physicians themselves. In addition, the NSEP can offer opportunities for specialisation and development in cooperation with (inter)national colleagues by means of fellowships and master classes. NSEP sections provide members with the opportunity to network with other experts in diverse areas of emergency medicine. Next to the existing sections (Emergency Ultrasound, Procedural Sedation and Analgesia, Sepsis, Child Abuse and Domestic Violence), other niches can be found, such as Pediatric Emergency Medicine, Toxicology, Disaster Medicine, Chemical–Biological–Radiological–Nuclear Medicine and many more.

### Earned-autonomy strategy

Emergency medicine requires unique skills and specialist knowledge. Given the 3-year limitation of the present training programme, training to the level of medical specialist cannot be achieved. Therefore, earned autonomy, driven by knowledge and competence, will be the operating principle to achieve greater authority and decision-making power for emergency physicians in the Netherlands for now.

### Development of academic emergency medicine

Emergency medicine training programmes in the Netherlands were initially started by nonuniversity teaching hospitals. Academic centres joined in rather late. Only over the last few years, the academic centres have started to catch up. With the first Dutch chair for emergency medicine at the Erasmus University Rotterdam, an important prerequisite for independent scientific development has been met. It is hoped that other universities in the Netherlands will follow this good example. The development of academic emergency medicine is reliant on many factors: agenda, budget, time and tutors, for example. Motivation and persistence among members of the NSEP is essential to fulfil the development of academic emergency medicine. The scientific forum for emergency medicine in the Netherlands is a newly established academic community. Historically, the Netherlands have a strong tradition of scientific contributions to the development of medicine. The growing speciality of emergency medicine can, in cooperation with established medical specialties, begin to make its own unique contributions to continue this tradition and broaden scientific knowledge in emergency medicine.

## Conclusion

### *Emergency medicine, who will care?*

Emergency medicine as an independent medical profession in the Netherlands has outgrown its infancy. Since 1999, much has been achieved, providing a solid foundation and a good starting point for future challenges. Of course, we cannot predict the future of emergency medicine in the Netherlands, but we expect emergency physicians to shape that future.

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## Conflicts of interest

There are no conflicts of interest.

## References

- 1 Vaststelling van het Besluit Spoedeisende Geneeskunde. Available at <http://knmg.artsennet.nl/Opleiding-en-Registratie/Nieuws/O-R-Nieuwsartikel/Vaststelling-van-het-Besluit-Spoedeisende-geneeskunde.htm> [Accessed 2 January 2012].
- 2 Deloos H, Bierens J, PT Smit, Buylaert W, De Boer J. Emergency medicine; a new discipline urgently needed. *Neth J Med* 1990; **134**:1464–1466.
- 3 IGZ rapport 1994 "De keten rammelt". Available at [http://www.acutezorg.nl/upload/pdf/De\\_keten\\_rammelt.pdf](http://www.acutezorg.nl/upload/pdf/De_keten_rammelt.pdf) [Accessed 2 January 2012].
- 4 Van Geloven AA, Luitse JSK, Simons MP, Volker BS, Verbeek MJ, Obertop H. Emergency medicine in the Netherlands, the necessity for changing the system; results from two questionnaires. *Eur J Emerg Med* 2003; **10**:318–322.
- 5 KNMG December 2008 "Curriculum Opleiding tot Spoedeisende Hulp arts". Available at <http://knmg.artsennet.nl/Opleiding-en-Registratie/Nieuws/O-R-Nieuwsartikel/Curriculum-Opleiding-tot-Spoedeisende-Hulp-arts.htm> [Accessed 2 January 2012].
- 6 IGZ rapport 2004 "Spoedeisende Hulpverlening: haastige spoed niet overal goed". Available at <http://www.ggd Kennisnet.nl/kennisnet/uploaddb/download/object.asp?atoom=26482&VolgNr1> [Accessed 2 January 2012].
- 7 Werkgroep kwaliteitsindeling 2009 "Spoedeisende Hulp: vanuit een stevige basis". Available at <http://www.veiligheidszorg.nl/scrivo/asset.php?id=496020> [Accessed 2 January 2012].
- 8 Mathers CD, Loncar D. *Updated projections of global mortality and burden of disease, 2002–2030: data sources, methods and results*. Switzerland: World Health Organization Report Geneva; 2006; p. 237.
- 9 VWS discussienotitie 2010 "Goed op tijd". Available at [http://www.nvshv.nl/seh/upload/File/reactieNVSHVgoed\\_op\\_tijd\\_definitief.doc](http://www.nvshv.nl/seh/upload/File/reactieNVSHVgoed_op_tijd_definitief.doc) [Accessed 2 January 2012].
- 10 Holliman CJ, Mulligan TM, Suter RE, Cameron P, Wallis L, Anderson PD, Clem K. The efficacy and value of emergency medicine: a supportive literature review. *Int J Emerg Med* 2011; **4**:44.
- 11 European Curriculum for Emergency Medicine. Available at [http://www.eusem.org/cms/assets/1/pdf/european\\_curriculum\\_for\\_em-aug09-djw.pdf](http://www.eusem.org/cms/assets/1/pdf/european_curriculum_for_em-aug09-djw.pdf) [Accessed 2 January 2012].