Going Dutch: Emergency Nursing in the Netherlands

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What is the first thing that comes to mind when thinking of the Netherlands? Windmills, tulips, speed skating, the red-light district, and drugs? Next to these iconic trademarks, the Netherlands is also known for its health care system, which is not only well organized but also accessible to all who live and work in the Netherlands. This article provides an inside look into the Dutch health care system focused on emergency nursing.

The Netherlands

The Netherlands is a relatively small but densely populated country. It is about 13,084 square miles (for comparison, Maryland is 12,407 square miles)[1]; has 17 million inhabitants, which accounts for 1,259 inhabitants per square mile (for comparison, the United States has 84 inhabitants per square mile)[2]; and is situated in Western Europe. Given its geographical location and moderate, temperate climate, natural disasters are rare.

The Dutch are a healthy population with a life expectancy of 79.5 years for Dutch men and 83.1 years for Dutch women.[3] Cancer is the number 1 cause of death, followed by heart and vascular disease. In the year 2011 (and holding stable), a total of 5,844 people died of non-natural causes (35 deaths per 100,000 inhabitants), with suicide as the leading cause (28.2%), followed by traffic-related incidents (11.2%). Further causes of non-natural deaths included falls (2,376), accidents in or around the house (911), violence (143), drowning (70), and firearms (49). Traffic participation is relatively safe. In 2011 a total of 4.97 traffic-related deaths were registered per 1 billion traffic kilometers. This is low in comparison with the United States with a rate of 9.03 deaths per billion kilometers.[4] In the Netherlands a decrease has been seen when it comes to traffic-related deaths; 1,000 deaths were recorded in 1990 compared with 653 in 2011. Multiple factors can be held accountable for this decrease, for example, the introduction of speed limits on highways, tougher enforcement of the speed limits, and the increase in traffic, which in hindsight forces the driver to reduce his or her speed. Bicycles are one of the most frequent forms of transportation, and 30.2% of all traffic-related deaths are bicycle related.[1] Wearing a helmet while riding a bicycle is not mandatory for adults or children, and few people wear them.

In the Netherlands there are 114 general hospitals. Of these hospitals, 93 have an emergency department (Figures 1 and 2). Since the 1980s, emergency services have changed dramatically. Before that time, emergency departments only coordinated the initial assessment of patients. The care that was provided was of especially low complexity and consisted of a large number of minor emergencies. The emphasis in the emergency department was first assessment and transfer to a ward where it was thought that the patient would receive the proper care. In this day and age, emergency departments in the Netherlands are staffed by highly qualified, well-trained nursing and medical staff, and all patients receive excellent care.

In the 1990s, international research showed that improvements in the emergency chain, both inside and outside of the hospital, could bring significant health benefits and that, by investing in acute care, a reduction in both mortality and morbidity rates could be realized.[5-6]

The Government

The Dutch government also realized the importance of a proper emergency chain. Because of this quality boost, 12 hospitals were granted the status of a trauma center, similar to a Level 1 hospital in the United States. These trauma centers must meet criteria set by the government and are considered experts when it comes to emergency medicine.

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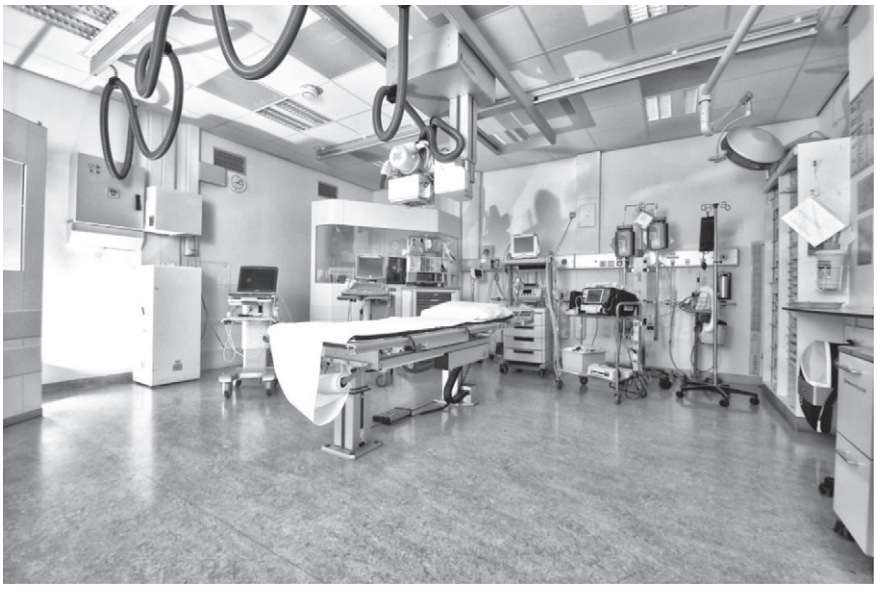

FIGURE 1
Trauma room at Leiden University Medical Centre (Photographer, Alex van der Lecq).

Besides changes within hospitals in the Netherlands, the profession of emergency nursing also saw great changes. Until the 1990s, there was no separate training or schooling for nurses working in the emergency department. In the early 1990s, Advanced Trauma Life Support was introduced in the Netherlands. The establishment of a private professional organization for emergency nurses in 1992 (Dutch Association of Emergency Nurses, Nederlandse Vereniging van Spoedeisende Hulpverpleegkundigen [NVSHV]) was of great importance for the further professionalization of the emergency nursing profession. The NVSHV initiated the introduction of the Trauma Nursing Core Course in 1996 and the Emergency Nursing Pediatric Course in 2001. Next to these changes, the introduction of emergency medicine as a separate medical specialty also led to another quality boost in Dutch emergency care. In 2009 the Dutch government set up a committee (Breedveld Commission)[7] to introduce further quality classification for emergency departments. Basic requirements were set regarding not only equipment but also staffing, training, and responsibilities (Table). The commission's report also determined that the training and schooling of doctors working within the emergency department in many of the Dutch hospitals could be improved. This was in contrast to emergency nurses, who seemed well equipped for working within the emergency department.

The Emergency Nurse

The emergency departments in the Netherlands are staffed by well-qualified nurses. Because of their schooling, experience, and recurrent training, they are competent and skilled at their work. Each nurse in the Netherlands follows a basic 4-year nursing training program in which he or she becomes competent in several areas, such as coordination of care, communication, science, and development of care. This nursing education can be completed at 2 different levels: levels 4 and 5. The level 4 nurse has a standard nursing qualification. He or she works in a hospital performing all the nursing tasks.

The level 5 nurse is in possession of a bachelor of nursing degree. This nurse performs a leadership role and initiates care processes. He or she is open to consultation by colleagues and other disciplines. In addition, he or she is able to act in situations in which no protocols or requirements are available and standing protocols are not applicable. This nurse is able to adapt, provide health education, and play a role within professional development, quality assurance, and quality improvement. The level 5 nurse is a proactive team member who, along with performing regular nursing tasks, will be part of the education and guidance of students and can be a participating member of different task forces. For example,

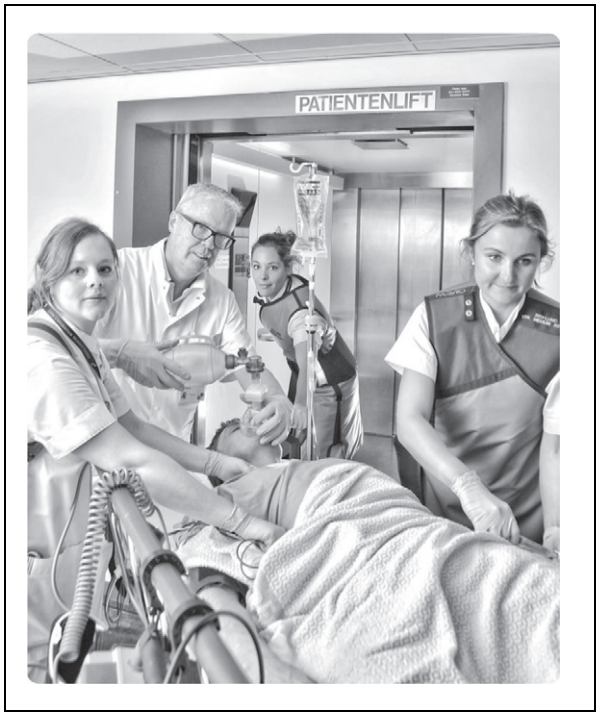

FIGURE 2

Authors demonstrating patient transport in emergency department at Leiden University Medical Centre (Photographer, Alex van der Lecq).

he or she can be involved in the development and implementation of new protocols or can take care of the education of fellow nurses.

Every Dutch nurse must be registered within the Beroepen in Gezondheidszorg (BIG) registry on completion of his or her training. The BIG registry is a centralized body where all professionals in the Dutch health care system are required by law to register. When registered with the BIG registry, the nurse may carry the title of nurse and is subject to possible disciplinary action. The condition for registration with this group is the possession of a valid nursing qualification that is acquired once the nurse meets the predetermined standards of a registered nurse. The Netherlands does not have a system of board examinations.

Every 5 years, an analysis is performed to examine whether the nurse has put in enough working hours to be able retain his or her title. In August 2013, the NVSHV started its own registry of qualified emergency nurses. To be registered, an emergency nurse must prove that he or she has sufficient work experience and has undergone a certain amount of training.

Within the Dutch emergency departments, some nursing procedures are called "reserved procedures," which are medical procedures that bring unacceptable risks to the health of a patient when performed by unqualified persons. A nursing student is not qualified to perform these actions until a written examination and practical examination have been successfully passed. The nurses then undergo testing on these procedures (eg, performing blood tests, inserting catheters, giving blood products, and initiating infusions) every 5 years by written examination, assisting with competency.

After one gains experience as a basic nurse, the possibility exists to continue training. This training takes place while the nurse works in the emergency department. To become a qualified emergency nurse, the nurse must complete an advanced program. During training, he or she will gain qualifications in acute care for all patient categories, ranging among all ages and various health conditions. Performing evidence-based research is also a part of the training criteria. This emergency nursing qualification consists of an 18-month course comprising a working/learning program. After successful completion of the emergency nursing course, recurring courses such as advanced life support must be followed for the nurse to maintain his or her status as an emergency nurse. Furthermore, the Trauma Nursing Core Course, Emergency Nursing Pediatric Course, and a triage course are mandatory for all emergency nurses. To ensure adequate training, the Dutch government, Dutch hospitals, and the NVSHV take part in a regulatory body, the Commisie Zorg Opleiding, which oversees the quality of the training programs for emergency nurses.

Because health care is a 24-hour business, shift work is a necessity. In the Netherlands this 24-hour period is mostly divided into 3 separate shifts: a day shift, an evening shift, and a night shift. All nurses work all various shifts with no specific structure. Every nurse will work all shifts, for example, a day shift followed by an evening or night shift. Rules have been set up to make sure that a nurse follows a healthy work schedule.

TABLE

Responsibility and function of an emergency nurse as described in the Breedveld Commission report

Perform triage as a dynamic process to establish grade of urgency
Assist with interventions (or, if necessary, initiate interventions) focused on stabilization of vital signs and bodily functions
Initiate additional research and treatment according to guidelines and protocols
Provide allocation of patient care and deployment of other disciplines according to protocol or as commissioned by emergency physician
Provide coordination of care

For example, if a nurse works more than 3 nights in a row, he or she will need at least 46 hours of rest before the next shift. A full-time nursing position consists of 36 hours per week, and part-time positions are also available, which can vary in hours.

In the emergency department, doctors and nurses work as a close-knit team. By following algorithms, protocols, and standards, a clear division of tasks and responsibilities exists. The doctor diagnoses and prescribes therapy, whereas the nurse is responsible for taking histories, drawing blood (venous and arterial), inserting tubes (gastric tubes, catheters), initiating intravenous lines, administering medication and blood, completing electrocardiograms, and assisting with invasive actions performed by a physician. To promote cooperation within the team, annual team training and simulation education are provided.

Dutch Economy Versus the Request for Emergency Care

The Netherlands is characterized by a regulated rivalry within the health care sector. This means that the health care market has 4 main players: the government, insurance companies, patients, and health care providers. Insurance companies negotiate with providers, on behalf of contracted patients, regarding the volume and quality of care. Not every treatment is negotiable. Difficult medical treatments, such as heart transplantation, have a fixed price, which is determined by the treating hospital. Every Dutch citizen aged 18 years or older is legally obliged to obtain an insurance plan. The content of the insurance package is determined by the government and health insurance providers. It is an individual's responsibility to obtain a health insurance plan, and an insurance company cannot reject a patient. A discount on a health plan is sometimes possible when using a company's collective health care plan.

Within a health care plan, a patient pays a nominal premium (established annually) to his or her insurer; in 2013 this amount was about €90 per month (approximately US $125). In addition, a compulsory "own-risk" element must be paid (€360 [US $500] in 2014).[8] This is the amount each Dutch individual has to pay by himself or herself, regardless of which type of insurance he or she has. To lower the monthly rate, the possibility exists to raise the compulsory own-risk element and pay a lower monthly fee. An income-related contribution of 7.75% of the individual's income is also required. This care-related income tax money is used by the government for chronic care, which is mainly spent on intensive elderly and disabled care.

The costs of Dutch health care are rising. In 2012, 15.4% of the gross national product was spent on health care,[3] and this percentage has risen appreciably. Because of rising costs, a trend exists to increase the own-risk element and to decrease the content of the basic insurance package. These are 2 examples of cost-controlling and steering instruments initiated by the government. A visit to one's primary caregiver or general practitioner does not fall under this compulsory own-risk element in which the government encourages the use of more inexpensive family medicine. The own-risk element also does not apply to supplementary insurance or maternity and obstetric care. If the deductible has been paid, the care, subject to any additional package, will be fully reimbursed by the insurer.

Finding the Balance

The Dutch government and its citizens demand high quality when it comes to health care. Qualitatively high levels of care are an expensive business. As a method of cost management, changes within the compulsory health insurance system are being implemented. The question is whether the deductible or own-risk element will influence the patient's choice of seeking care from either his or her general practitioner (which is much more inexpensive) or the emergency department. Moreover, if the patient's own risk for the current year has been paid in full, will this influence his or her choice of using either the more inexpensive general practitioner or the more expensive emergency department, which is treating a growing number of patients? As this number continues to rise, improvements will also need to be made within the emergency department. Cost- and time-saving pathways will need to be introduced.

In the Netherlands, emergency care is an important part of the health care system, in which emergency nurses play a well-defined and important role. Emergency care in the Netherlands exists at a high quality level. Maintaining this high standard in times of growing demand and strain on budgets is one of the large challenges facing all professionals working in emergency care.

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