

## ICU Volume 12 - Issue 1 - Spring 2012 - Country focus: The Netherlands

**Dutch Intensive Care Medicine: Its Start, Professionalism and Future Prospects** 



The Dutch Society of Intensive Care celebrates its 35th anniversary this year, prompting this overview of developments in intensive care medicine within the Netherlands and the society known as Nederlandse Vereniging voor Intensive Care (NVIC), looking at eras of evolution and innovation, as well as assessing what the future holds.

The Emergence of Intensive Care Medicine in the 1950's and the Role of Polio-Epidemics.

In the Netherlands, as in may other countries, the 1955 polio-epidemic stimulated the organisation of treatment of patients suffering from respiratory failure. Before the epidemic, patients suffering from poliomyelitis were treated with respiratory support on an incidental basis.

In the university hospitals of Groningen, Utrecht, Amsterdam and Rotterdam, respiratory care units were established after the 1950's outbreak of polio, with input coming from anaesthesiologists, neurologists, pulmonologists and physiologists. In later years these units developed into respiratory care units for the treatment of patients developing respiratory failure resulting from other causes like sepsis, drowning, intoxications and post-resuscitation. The units progressed into intensive care units (ICU) for the treatment of patients with vital organ dysfunctions originating from medical disciplines. At the same time surgical intensive care medicine developed rapidly, impelled by expanding possibilities in cardiac- and cardio-pulmonary bypass surgery.

Cardiac surgery using heart-lung machines was started in the university hospital in Groningen in 1957, by van der Heide, a cardiac surgeon, and Dorlas, an anaesthesiologist. After cardiac surgery, patients were treated in the intensive treatment unit by attending anaesthesiologists. After the first coronary bypass procedure, in March, 1968, cardiac surgery continued to develop at a rapid pace, booming in the seventies and eighties as in many other countries.

By the beginning of the 70's nearly every surgical discipline had expanded its possibilities, mainly due to developments made in anaesthesia and postoperative intensive care. In these days the number of potential intensive care patients increased more rapidly than the available number of ICU beds. This steep increase in the need for intensive care facilities in all university hospitals and major non-university teaching hospitals necessitated the development of organisational formats for intensive care medicine. Also, the need for training of specialised IC-nurses and doctors became clear. At the end of 1979, a postgraduate programme in intensive care medicine for anaesthesiologists was developed by Dr. dos Reis Miranda Sr. in Groningen. Later, the first official training for anaesthesiologists by means of a fellowship in intensive care medicine was started in the Onze Lieve Vrouwe Gasthuis in Amsterdam by Dr. Zandstra.

The increase in motorisation in the 70's resulted in an increase in trauma patients, and the need for further intensive care treatment facilities increased once more, including a wider need for intensive care beds. Furthermore, several university hospitals started with organ transplant programmes, so yet more emergency and elective patients were competing for the limited number of available beds. These developments urged the need to further professionalise intensive care management as well as the organisation of the professionals working in the field of intensive care medicine. As a consequence, professional recognition, scientific accountability, and more uniform defined training developed in this period.

Already in the 60's, anaesthesiologists started to work as full-time intensive care doctors in postoperative intensive treatment units. At the end of the 70's, medical directors of intensive care units and formal staffs of intensivists were appointed. As a sign of further professionalisation, the NVIC was founded in 1977 by Prof. Dr. Bruining and Prof. Dr.Thijs. From the start the primary goal of the NVIC was to stimulate professionalisation of intensive care medicine in the Netherlands. With the development of the medical arena, there was a growing field of research, and as a consequence, a claim on academic positions. Prof. Dr. Thijs was appointed the first extraordinary professor in acute internal medicine and 'de facto' intensive care medicine at the Free University in Amsterdam in 1987. In the same year, Prof. Dr. Bruining was appointed as extraordinary professor in surgical intensive care at the Erasmus University in Rotterdam.

Since several different disciplines such as anaesthesiology, surgery and internal medicine became involved in intensive care medicine, an © For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.

initiative to combine these efforts was founded. The Gemeenschappelijke Intensivisten Commissie (GIC), the Dutch intensive care college, was founded in 1991 by representatives of the Dutch Society for Anaesthesiology, the Dutch Surgical Society, the Dutch Society of Internal Medicine and the Dutch Society of Intensive Care. The GIC was founded to create a college responsible for registration, training and advisory tasks, and consisted of intensivists originating from the different societies mentioned above.

The first president of the GIC was Prof. Dr. van der Linden with Dr. Stoutenbeek as the first secretary. In 1995 the Dutch Society of Neurology joined the GIC, followed by the Dutch Society for Cardiology in 1999, the Dutch Neurosurgical Society in 2001 and the Dutch Society for Pulmonology and Tuberculosis in 2002. The task of the college is to advise the societies in matters of registration and to formulate the training programme in intensive care medicine. Furthermore, the societies provided the GIC with the mandate to audit training centres and to create the national theoretical training programme; the so called GIC days. This GIC programme has been organised for all specialists in training from the Dutch training ICU's once every month ever since its establishment in 1995. The current course contains a two year adjuvant ICU training module as a subspecialty for medical specialists in anaesthesiology, internal medicine, pulmonology, surgery, cardiology and neurology. The training is formally ended by participating in the European Intensive Care Diploma examination.

## The Nederlandse Vereniging Poor Intensive Care

In 1993 Inca, a foundation of young doctors in intensive care medicine, with a primary focus on education in intensive care medicine, was founded, and in 1997 the decision was made for it to join forces with the NVIC. Intensivisten Vereniging Nederland also later merged with the NVIC and from that day forward the NVIC has been the only Dutch Society in Intensive Care. Since it was founded in 1977, the NVIC has had many presidents, as seen in Table 1. The primary objectives of the NVIC are:

- To promote intensive care medicine;
- To stand up for the interests of the intensive care patient by stimulating improvement of effective, patient orientated and successful treatment of ICU patients and stimulating further development and professionalisation in intensive care medicine and organisation;
- To represent all intensivists in the Netherlands and stand up for their interests;
- To define and implement current and future policies in respect of intensive care medicine and organisation in the Netherlands;
- To stimulate the progression of quality in intensive care medicine and monitoring; and
- To augment the knowledge area of intensive care by stimulating research.

Currently, the NVIC has over 1,200 members. As mentioned above, one of its goals is to increase professionalisation in intensive care. Another important objective is education. From the point of view of the NVIC, the patient holds the central role; every patient in need of intensive care treatment should receive this care in a timely and adequate fashion. In order to facilitate intensive care departments and intensivists in the Netherlands, the NVIC has published several national guidelines. The spectrum of these guidelines is broad; they cover medical treatment as well as organisational aspects. A part of the guidelines is multidisciplinary, developed together with other societies. For example, the treatment of Guillain Barre syndrome is a project by the Society of Neurology together with the Dutch Society of Intensive Care.

Besides the development of guidelines, the NVIC gives high priority to training and congresses; hence, it organises congresses and training sessions for young doctors and post-graduates. In addition to the annual congress, The Intensivistsdays, the NVIC organises a large number of thematic courses. As well as providing the fundamental critical care support (FCCS) course, it runs classes in mechanical ventilation, infection in the ICU, circulation in the intensive care patient, neurology, renal, liver and bowel issues in intensive care medicine, echography as well as trauma and acute medicine. The programme of the Intensivistsdays is composed of state of the art lectures, lectures about PhD theses in the field of intensive care medicine, educational sessions and the presentation of research. The best PhD thesis in the field of intensive care medicine is rewarded with an annual thesis award. The accreditation committee of the NVIC assesses all intensive care congresses for accreditation

Another important issue for the NVIC is the monitoring of the quality of intensive care departments; thus, the national quality audit committee (NKIC) audits a number of ICU departments every year. The guideline establishment, Organisation and practices in ICU departments for adults in the Netherlands (NVA 2006), forms the basis for these audits. This guideline gave an enormous impulse in further professionalisation, mainly through the formalisation of nursing staff and medical staff on every intensive care department, as well as the formalisation of the position of the ICU in the hospital, resulting in higher quality standards. At this moment a committee is working on the revision of this important guideline. As in many countries, not all intensive care departments in the Netherlands have the same expertise. In order to treat every intensive care patient adequately for his/her particular illness, with the modalities needed, ICUs have to work together within the (geographical) region. To enumerate interregional collaborations and to offer a helping hand, the NVIC started the Samenwerken In de REgio (SIRE) project, resulting in many reccommendations.

Another role for the NVIC is to convene with all forums in the Netherlands, which, in the broadest sense, play a role in intensive care medicine. Parties with whom the NVIC is in contact are the Ministry of Health, The Dutch Healthcare Inspectorate, the European Society of Intensive Care Medicine (ESICM), the Dutch authority of finance in the Healthsector, among others.

The activities of the NVIC are extensive, and could not be done without the work of NVIC committee members (Table 2). Thus, on this 35th anniversary of The Dutch Society of Intensive Care, Peter de Feiter, president, NVIC, expressed to ICU Management his gratitude to all those involved: "We would like to take this opportunity to thank all our committee members for their efforts towards the NVIC and our shared goals. Together we are bringing intensive care to an ever higher level."

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