European Child Neurology Training Advisory Board

Report:

EVALUATION OF THE CHILD NEUROLOGY TRAINING OF THE NETHERLANDS 2007.

This report was presented and approved at the Training Advisory Board in Kusadasi, Turkey 25 September 2007.

Lars Palm,
Chairman.

The European Child Neurology Training Advisory Board

EVALUATION OF THE CHILD NEUROLOGY TRAINING OF THE NETHERLANDS 2007.

Background:

In 2002 Child Neurology was accepted on the European level as a subspecialty of Paediatrics as well as of Neurology. In the process of the definition of the specialty, a European training programme, the syllabus of Child Neurology was compiled and accepted. As a means to implement the syllabus in the training of Child Neurology specialists in the European countries, the Committee of National Advisors in Child Neurology (CNA) and the European Paediatric Neurology Society (EPNS) in 2004 agreed to activate a Training Advisory Board as a joint effort. The Training Advisory Board includes 4 delegates from the CNA, 4 from the EPNS' Education and Training Committee and the president and secretary of the EPNS. The Board is chaired by the chairperson of the CNA.

The intention of the Training Advisory Board is to offer to national child neurology societies the opportunity to work together with them to evaluate the national training system. The ultimate aim is that the trainees of each European country be expected to reach a quality of training that is in accordance with the European training programme.

The Dutch Child Neurology Society (NVKN) has volunteered to have the Dutch training programme evaluated in accordance with this aim and as a pilot for the evaluation programme of the Training Advisory Board.

Evaluation visit

Method:

Lars Palm and Rozalia Kalmanchey visited Rotterdam on the invitation of the NVKN and discussions were held with Professor Leo Smit, secretary of the NVKN Supervisory Training Committee and dr Coriene Catsman-Berrevoets, chairperson of the NVKN.

For background information the document "Dutch Society of Child Neurology – Sub specialisation/ Area of interest Paediatric Neurology" (appendix) was supplied by the NVKN. The document is a resolution between the Dutch Paediatric Society, the Dutch Neurological Society and the Dutch Child Neurology Society. It lays out the basic guide-lines for training and registration as a Child Neurology specialist in the Netherlands.

This report is based on the minutes of LP and RK. Comments and factual corrections from members of the Training Advisory Board and from the Dutch group have been received and given attention in preparation of the text.

Child Neurologists in the society:

The Netherlands have 16 million inhabitants. The national society, NVKN, has 350 members including child neurologists, doctors in neurodisability, paediatricians with an interest in the field, psychologists and physiotherapists.

About 50 specialists in child neurology are registered; about 10-15 fellows are in training. 6-7 retirements will take place within the next 5 years.

Hospitals are financed in agreement with insurance companies according to a "Diagnosis Related Group – system" that has now been running for 3 years. Child neurology is cost intensive and demands higher fees than other paediatric and neurological branches.

General requisites for specialty training in Child Neurology in the Netherlands:

Child Neurology is not a recognised specialty or subspecialty in the Netherlands. Training is supervised by the NVKN and a registration and a certificate is issued by the Training Committee of the NVKN. This certificate does not have a legal value, and it is possible to set up a child neurology practice without it. However, it does have a clear impact on training and continued professional activity in child neurology. It is valid for a period of 5 years and can be reissued if continued active commitment to child neurology and continued professional development are confirmed.

Trainees in child neurology have a background in Neurology or Paediatrics and full specialisation is demanded in the background specialty. A neurologist remains a neurologist and a paediatrician a paediatrician after child neurology training.

Trainees are employed by the hospital and the cost of training is covered by the hospital department budget. Thus training competes with other needs like staff and equipment.

Tutoring and training centres:

The NVKN Supervisory Training Committee takes responsibility for the appointment of tutors to each trainee and defines the levels of qualifications required from the tutor as well as the role to be fulfilled. The supervisory training committee also establishes the Training Unit in Child Neurology according to criteria in the attached document.

The NVKN Supervisory Training Committee is composed of:
The chairman, member of the executive committee of the NVKN;
A representative of the Dutch Neurology Society
A representative of the Dutch Paediatric Society
Two child neurologists with major commitment to child neurology.

Training schedule

The detailed training schedule is laid out in the NVKN document (appendix). Total training time, 7 years including the background specialty, is the same for neurology and paediatrics trainees. 4.5 years are spent in training the basic background specialty.

Specific child neurology allocation is 2.5 years in total with 1 year in child neurology and 1,5 in the non-background specialty.

Content of training:

The curriculum of the training is specified through requirements to be met by the training centre. Thereby the facilities and opportunities for hospital in-patient and out-patient patient contact and management are stated. The tutor has a far-reaching duty to care for the quality of the training and to follow actively the development of the trainee.

There are no clearly defined modules of training with defined goals, rather a general professional goal based on patient and case exposure, scientific work and studies.

Apart from training within neurology including clinical neurophysiology and paediatrics no external training periods are demanded. Specifically there is no stated training period in neurodisability/habilitation and none in child psychiatry. There is no requirement for scientific work by the trainee, but the tutor is required to display scientific interest and activity.

Clinical neurophysiology:

Clinical Neurophysiology constitutes a part of neurology and is not an independent specialty in the Netherlands. Trainees from neurology have 1.25 years of training in Clinical Neurophysiology during the background training and achieve Clinical Neurophysiology Qualification. Trainees from paediatrics have 3 months of Clinical Neurophysiology as a part of their 1.5 years of neurology training. They cannot achieve this Clinical Neurophysiology Qualification.

Rehabilitation/neurodisability/habilitation:

This is a specialty on its own, very much (98%) dedicated to motor function and with little experience of other types of dysfunction. A growing collaboration is seen between rehab. and child neurology in motor dysfunction. Paediatric rehabilitation is a developing profile within rehabilitation specialty. Psychological development and dysfunction does not seem to have a major part within rehabilitation.

Registration and re-registration:

A diploma in child neurology is awarded by the NVKN on recommendation by the tutor. Registration as child neurologist, also by the NVKN, demands a statement of major commitment to child neurology and is valid for 5 years. For re-registration as a child neurologist at 5-years intervals regular contact with an academic centre is mandatory.

Comments:

Dutch training in relation to the European syllabus:

The European syllabus states in a very detailed fashion the aims of the child neurology training, the curriculum and the training schedule. The NVKN has chosen a different mode – instead to describe the training centre and to be very careful with the selection of the tutor and the tasks of the tutor. The trainee is exposed to a smorgasbord of child neurology and will pick as much as is possible to digest from this, supervised by the tutor. The NVKN thereby offers to teach, but there is very little in the document to guide the trainee as to hers or his professional aims and what to demand from the training system.

The NVKN does not demand nor offer any training in neurodisability care while the syllabus suggests 1-2 years of neurodisability training. The reason for this is that in the Netherlands neurodisability is not a part of child neurology care but rather of rehabilitation medicine. Habilitation of motor disabilities of children and young people seems to be a growing interest among rehabilitationists. It is important that the link between child neurology and the multidisciplinary work with neurodisability is kept active for the actual case management as well as for clinical and scientific follow-up. It is also important that management of intellectual, cognitive, perceptual, linguistic and social impairment related to dysfunction of the nervous system is taken care of by staff with high competence in child neurology and that the child neurology trainee achieves deep knowledge in this field. An increase of the exposure to neurodisability would be advantageous. Also an introduction to neuropsychiatry and psychiatric neurodisability would be valuable, either as an in-depth study or as a training period.

Child neurology neurologists achieve full qualification in clinical neurophysiology after 1¼ year of clinical neurophysiology training during their basal neurology training while child neurology paediatricians only have an introductory period of 3 months during the child neurology training. Apart from the difference in clinical neurophysiology 3 months of child neurology exposure are withdrawn from the paediatric trainee, and the basic neurology training for the neurologist is limited to 3¼ years. Clinical neurophysiology in the Netherlands is a part of neurology, not an independent specialty. A total training of 1¼ year

seems a short time to cover all basic and clinical science and the methodology of clinical neurophysiology but this matter is not within the scope of the present report.

The status of child neurology specialty:

In the Netherlands there is an inclination towards neurology background in child neurology, although there are trainees from both background specialties. Child neurology wards tend to be located within paediatric departments in children's hospitals although run by neurology staff as far as neurological problems are concerned. This dual command demands close cooperation between the departments of neurology and paediatrics as well as will and intention to work seamlessly together. Child neurologists who are neurologists tend to be employed in neurology – child neurologists from paediatrics tend to be employed in paediatrics, although exceptions seem to be the rule. Thus the group around child neurology is not a formal unit but split between at least two medical and administrative leaderships.

If child neurology were recognised as a specialty of its own, or as an official subspecialty of neurology as well as paediatrics, would that change the situation? At least formally it would be clearer what constitutes the child neurology clinical group and on what basis clinical child neurology research can develop. Having a dual command is complicated and harbours the risk for misunderstandings and inter-clinical group struggles.

At present the child neurology diploma does not have a legal value and it is possible to establish a child neurology practice without it. An official recognition of child neurology would give a clear demand for training and registration to claim the sub-specialty. At present the NVKN copes with the situation by keeping in close contact with those who practice child neurology.

On the European level child neurology is a recognised sub-specialty but formal recognition of specialties and sub-specialties is a national responsibility. Child neurology is being recognised in several European countries and the EPNS and the CNA continue to work for a wide recognition and the Training Advisory Board would heartily welcome a Dutch child neurology specialty recognition. There is no European diploma of child neurology training to achieve.

Future development:

Given the Dutch population of 16 million, the present number of about 50 child neurologists must be an absolute minimum. With the estimated number of future retirements and the present number of trainees there will be an increasing need for more child neurologist, through training or immigration. The need suggested in this report for increased activity within neurodisability and neuropsychiatry increases the demand for training further.

Dutch child neurology repeatedly has proven a very high clinical and scientific standard. The demand for the future is to continue to live up to this standard and to develop it further.

August 2007,
European Child Neurology Training Advisory Board,

Lars Palm
Chairman

Rozalia Kalmanchey José-Carlos Ferreira Sergiusz Józwiak
CNA delegates

Oebele F. Brouwer Paul Casaer Florian Heinen Richard Newton
EPNS Education and Training Committee delegates

Colin Kennedy, Ingeborg Krägeloh-Mann
President EPNS Secretary EPNS

APPENDIX

Dutch Society of Child Neurology

Sub-specialization / Area of interest Paediatric Neurology

Resolution reached following tripartite discussion between the
Dutch Paediatric Society,
Dutch Neurological Society,
Dutch Child Neurology Society

Draft 23rd July 1999

Approval by paediatric and neurology societies:
Dutch Paediatric Society (NVK) 3rd February 2000
Dutch Neurology Society (NVN) 7th December 1999

Preparatory committee for training in Child Neurology
L.M.E. Smit
O. Van Nieuwenhuizen

J.J. Rotteveel

Note:
The Dutch national Medical Society recognizes major specializations in Neurology and Paediatrics. Sub-specialization in paediatric neurology requires registration in either paediatrics or neurology after a complete training in these specializations.

Introduction:

The Dutch Child Neurology Society (NVKN) has set itself the aim of developing a schedule for paediatricians and neurologists who wish to train in clinical child neurology. After completing their training according to set guidelines, a certificate, *Training in Child Neurology NVKN,* will be issued.

The NVKN believes that the term child neurologist should be reserved for those who, after completing the child neurology training, work with a major commitment in the field of child neurology. With regard to the child neurology training, two target groups can be distinguished; namely, the future generation of child neurologists with a major commitment to child neurology, - they will usually have a position in an academic or larger medical centre, and paediatricians and neurologists, who in general hospitals, within the division of duties of the partnership, have child neurology as an area of special interest.

Chapters:

J *Registration, re-registration, major commitment*

K *Procedures*

A. Training schedule:

The schedule consists of two elements: (1) the main part, basic education/training in neurology or paediatrics, and (2) the part specifically allocated to training.in child neurology. At present, the main course for paediatrics consists of 4.5 years general paediatrics, and for neurology of 4.5 years neurology/clinical neurophysiology (KNF). The specific child neurology allocation in paediatrics is 2.5 years: 1.5 years of neurology and 1 year of child neurology. For neurology, 2.5 years: 1.5 years allocated to paediatrics and 1 year to child neurology. For neurologists, clinical neurophysiology in children falls within the main part of the study, for paediatricians within the specifically allocated part.

Inasmuch as the course forms part of the training in the major specialization, its composition and duration is the responsibility of the tutor in the major specialization.

Major specialization paediatrics*

1P	1P	1P	1P	0.5P 0.5 CHILD NEUROL OGY	0.5 CHILD NEUROL OGY 0.5N	1N incl 0.25 CHILD NEUROL OGY

Major specialization neurology**

1N	1N	1N	0.25N 0.75 KNF	0.5 KNF 0.5 CHILD NEUROL OGY	0.5 CHILD NEUROL OGY 0.5P	1P

*

Here the requirement of the Consilium Paediatricum and Dutch Society for Paediatrics has been satisfied to adopt a complete package of general paediatrics in the course for the sub-specialization (4.5 years).

The KNF placement of a minimum of 3 months assumes a special course in child KNF, for which the NVKNF has produced guidelines. This placement does not confer a KNF qualification.

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This training course provides a complete qualification for clinical neurology and the KNF.

B. General requirements of the training leading to a certificate "Training in Child neurology NVKN"

Obligatory basic part of training as paediatrician or neurologist (see training course scheme).

In general, the trainee specialist ought to be in full-time employment.

The training board/committee NVKN can give permission for the training as child neurologist to be done on a part-time basis; the part-time training should at least consist of 50% employment.

The training board/committee can, in individual cases, give permission for part of the training to be followed abroad.

The trainee specialist should be qualified to practice medicine in The Netherlands.

C. Core Training in Child Neurology

The relevant clinic should have a separate (sub)department of child neurology. With regard to the training in the sub-specialization, child neurology, we refer to the Training Unit Child Neurology.

Requirements to be met by the OEK (Training Unit Child Neurology)

Patient care:

Minimal size of patient population Child neurology:

In- and out-patient supervision and medical responsibility for at least 1000 bed-days and 200 new out-patients per year.

Educational commitment/responsibility:

Active participation in post-doctoral education.

Research activity:

Within the OEK recognisable original scientific research should be carried out

The OEK should be situated in a medical centre, where there is opportunity for intensive cooperation with the departments of paediatrics and neurology. In the clinic involved, there should be an A-training course in paediatrics and an A-training course in neurology. One should have access to the following facilities, either within one's own centre or partly in structured cooperation with other centres:

neonatal intensive care

paediatric intensive care

neuropathology with interest and expertise in neuropathology and neuromuscular disorders in children

neuro-imaging with MRI, CT, angiography and echography facilities for neonates and children, as well as experience in functional tests

clinical neurophysiology with facilities for children

metabolic unit with clinical and technical laboratory expertise in diagnosis of neurometabolic disorders

consultative child psychiatry service

department of clinical genetics
department of neurosurgery
department of orthopaedics for children
rehabilitation unit
paramedical services including physiotherapy/logopaedics/remedial education/ergotherapy (FLOE)

The multidisciplinary cooperation should be supported by regular discussion between participating departments in particular with regard to
Neuro-oncology
neural tube defects
infantile encephalopathy (CP)
genetics, prenatal diagnosis
neurometabolic diseases

D. 18 month course in neurology

for those, trained in Paediatrics:

These 18 months include at least 3 months of clinical neurophysiology in children.
During the remaining 12-15 months, the student will have to become acquainted with the following aspects of neurology:
The main focus is training in observation and neurological investigation, where one learns to distinguish neurological symptom complexes on the basis of knowledge of anatomy, physiology and pathology. In addition one should acquire knowledge of general diagnostic principles and therapeutic aspects of the larger categories of patients - traumatology, oncology, movement disorders, epilepsy and headache.
In the interest of learning, it is very important that the trainee child neurologist be included in the duty rooster of the neurologists during his neurology placement.

E. 18 month course in paediatrics

for those trained in neurology.

During the 18 months of paediatrics for those trained in the basic specialization of neurology, knowledge and experience will have to be gained in the techniques of observation and clinical diagnostic investigation in children of different ages and an idea formed of how the developing child functions. One should become familiar with general principles of growth, water- and electroyte mnagement, pharmacotherpay and nutrition. Placements in the neonatal intensive care unit and intensive care of older children are very important. In addition to clinical work, one must perform a sufficient number of out-patient consultations.
It is important, certainly when learning to deal with emergencies, that the trainee child neurologist be included in the duty rooster of paediatrics during the training session in paediatrics.

F. Training clusters

The one-year course in child neurology and the 18 months of paediatrics/neurology added to the basic specialization, can be followed/put into practise in different clinics, but should be supervised in its entirety by one child neurologist/tutor. (inasmuch as this aspect of the training is not part of the training in the major specialization).

G. The tutor:

Recognition of the tutor:
The tutor derives his/her right to carry out training according to the guidelines of the NVKN, from a decision of the training committee of the NVKN.

In the case of a premature cessation, or interruption for a period of 3 months or more, of the activities of the tutor, or in the case of withdrawal of the OEK qualification, the training committee NVKN can decide how the child neurology training should becontinued.
The training committee can in special cases deviate from the stated specification.
The recognition of a replacement tutor occurs in the same way as that of the original tutor and under the same conditions.
*
The tutor should be a member of the NVKN and should declare that he/she will uphold the guidelines of the training committee NVKN.
*
To be recognised as a tutor in child neurology, it is required that the tutor has been registered for at least 5 years in the records of recognised specializations as a paediatrician or neurologist.
*
To be recognised as a tutor in child neurology, it is required that the specialist has been affiliated for at least 5 years with a clinic, which conforms to the demands set by the OEK and has been active on a full-time basis in the area of child neurology.
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From the CV of the tutor it should be apparent that there is an active and positive attitude towards scientific research in child neurology.

The recognition as tutor is extended for the duration of an individual training course approved by the NVKN training committee.

Duties of the tutor

The tutor should:
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devote sufficient time to the training and take care of accompanying work.

*

to have been and currently be interested in scientific activities (writing a thesis, publication of scientific articles and giving lectures) and promote interest in child neurology.

*

actively participate with the trainee child neurologist in multidisciplinry patient discussions, clinical conferences and scientific discussions. Ensure that there is sufficient contact between the trainee child neurologist and other specialists.

*

take care that the trainee child neurologist is given sufficient time and opportunity, under expert guidance:

- to study the basic sciences

to study child neurology and learn to recognise and treat the most frquently occurring illnesses.

to gain sufficient experience in “acute child neurology” and intensive care

to pay attention to shaping attitude

to become familiar with specific psychosocial problems

to gain insight into the organisation of health care, particularly care of the disabled

*

Give sufficient time and opportunity to traine child neurologist to continue to be able to fulfill the conditions of re-registration in the major specialization.

H. The supervisory training committee of the NVKN

The training committee, on the recommendation of the executive committee of the NVKN, is nominated by the General Board of the NVKN.
The duty of this supervisory committee is to preserve the quality of the child neurology course and support the continued existence of sufficient uniformity and quality of content of the sub-specialization child neurology, irrespective of whether the specialist stems from the major specialization Paediatrics or Neurology.

The activities of the committee are as follows:
Establishing the Training Unit Child Neurology (OEK)
Conferring training qualifications on the child neurologist/tutor
Extending approval to individual training schemes
Supervising the training scheme by means of inspection
Conferring the certificate *Diploma Child Neurology NVKN*
Advising the executive committee NVKN with regard to (re-)registration
Carefully following European developments on bringing uniformity to the sub-specialisation Paediatric neurology (incl. European Board of Certification for Paediatric Neurology) and advising the NVKN with regard to new developments in this area.

The supervisory board is composed of:
member of the executive committee of the NVKN, chairman of the committee
representative of the Dutch Society of Neurologists
representative of the Dutch Society of Paediatricians
2 child neurologists with major commitment to child neurology

I.Adapted training

On the basis of the curriculum vitae, and having established a major commitment to child neurology, the training supervisory committee has the right - by a unanimous decision - to award the certificate *Diploma Child Neurology NVKN"* to a registered neurologist or paediatrician, and to register them as a child neurologist.

J. Registration, re-registration, major commitment

On the recommendation of the tutor, after completion of the training, a certificate *Diploma Child Neurology NVKN* shall be awarded by the NVKN.
Registration as child neurologist by the NVKN occurs on the basis of a statement of major commitment to child neurology and is valid for a period of 5 years. On request, re-registration can occur, each time for a period of 5 years. Criterion for re-registration is, in addition to evidence of keeping up to date with current knowledge, a clear major commitment.

By major commitment to child neurology, the NVKN means that the person concerned is active for at least 50% of the working day (calculated on the basis of a full-time appointment), as medical member of staff for child neurology, in an appropriately equipped clinic, and be concerned with a variety of neurological disorders in children.

K. Procedures

Training in child neurology NVKN falls under the auspices of the executive board of the NVKN.
The training committee is authorized to nominate the tutors and to supervise the training.
The tutors present the individual training plan of candidates to the training committee NVKN for approval.
After completion of the training period, the tutor presents the candidate to the training committee, together with a training report and assessment.
This committee judges the curriculum and advises the executive board of the NVKN.
The executive board of the NVKN awards the certificate "Diploma Child Neurology NVKN".

As child neurology is not a specialization recognised by the SRC (Dutch Board for Medical Specializations), the paediatrician remains a paediatrician and the neurologist a neurologist. Registration in the sub-specialization child neurology with the Dutch Society for Paediatrics or Neurology remains primarily within the qualifications of the major specialization.

Those who, on the basis of a major commitment, wish to be registered by the NVKN as a child neurologist can address such a request to the executive committee of the NVKN. The Paediatricians are then authorised to choose whether they be called "Child Neurologist", or "Paediatrician-Child Neurologist (NVKN)", the Neurologists "Child Neurologist" or "Neurologist-Child Neurologist (NVKN)".