



Nordisk Uddannelse i Børneanæstesi for Anæstesisygeplejersker, NUBA

Nordisk Utbildning i Barnanestesi för Anestesisjuksköterskor, NUBA

Nordisk Fordypning i Barneanestesi for Anestesisykepleiere, NUBA

Nordic Training in Paediatric Anaesthesia for Nurse Anaesthetists

Education programme and contract

Nordic Cooperation for anaesthesia and intensive care nurses, NOSAM, coordinates a 1-year training programme in paediatric anaesthesia for nurse anaesthetists, NUBA. The purpose of the course is partly to increase the professional level within paediatric anaesthesia on Nordic level, and partly to develop the specialty of paediatric anaesthesia within anaesthesia nursing and to create a uniform educational programme on Nordic level.

Content of the programme:

The length of the programme is 12 months spread over:

- 9 months of clinical training in paediatric anaesthesia at an approved main educational location
- 4 weeks of clinical training at an external anaesthesia department
- Internship at another unit e.g. paediatric intensive care, neonatal department, paediatric pain clinic, 3 weeks total
- Three theory modules of 3 days duration

Goals of the training:

After finishing the programme, the student must be able to handle complex anaesthesia for children of all age groups independently. This must be done according to the existing guidelines integrated with the newest knowledge of the field. The student must be theoretically well informed within paediatric anaesthesia and be able to disseminate relevant knowledge about paediatric anaesthesia to her/his own groups of profession as well as interdisciplinary groups.

Target groups for the training:

Participants must be trained nurse anaesthetists with at least one year of experience within paediatric anaesthesia.

Training method:

The course contains of clinical training and a theoretical focus. The clinical training must be registered in a logbook and be revised in cooperation with a mentor. A scientific and evidence-based adjustment on both the practical and theoretical level is mandatory.

Tutor:

The training centre is obligated to point out a personal tutor for every student. The tutor must be a nurse anaesthetist with several years of experience in paediatric anaesthesia and be firmly anchored in the clinic. The tutor will be a support and help to the student. The tutor is to evaluate the internship with the student every other month. The tutor and the student create a plan together for the training period.

The steering committee for NUBA informs the tutor about the tutor function and can be used as a sparring partner for the tutors during the training period.

Goals of the clinical training:

During the training period the student must handle anaesthesia for minimum:

Premature/newborn before week 44:	10 cases
Children between 1 and 12 months:	50 cases
Pre-school children:	100 cases

Including:

- preparation for larger procedure with complex anaesthesia
- handling of airways of children with difficult airways
- pre-, per- and postoperative anaesthetic care
- educational and communicative tasks in relation to anaesthesia for children and their parents
- make a plan for pain treatment for the individual child
- training of anaesthesia for the critically ill child pre-, per- and postoperative

Documentation:

- 1) The logbook:

Every single anaesthesia that the student performs must be registered in a book. It must appear from this logbook if the student has handled the anaesthesia independently or under supervision. The logbook can be used in connection with the evaluation of chosen anaesthesia.

The logbook must contain information about:

- The age and weight of the child
 - Diagnosis and operation
 - Special nursing aspects in relation to the anaesthesia process including contact with the child/parents
 - Anaesthesia method and process
 - Reflections
- 2) Summary from external clinical training course
 - 3) Documentation of theoretical presentation on theory modules

Content of theory modules:

See appendix page 7 !

External training courses:

- Clinical training at an external anaesthesia department has a duration of 4 weeks. The student is responsible for contacting the training site. The exchange should not take place any sooner than 5 months after the beginning of the course.
- An internship of 3 weeks in another unit during the year is also required. This internship must take place in a paediatric intensive care, neonatal or another unit with special focus on children. This internship can be divided and can take place on the main training site. It must be planned with the tutor, the training site and the chosen place of the internship.

At the end of the external training, the student is to make a short written summary of the stay with a description of the clinical and theoretical activity. The summary is part of the documentation for the training as a whole.

Obligations of the student:

The student must evaluate the training with the tutor at least every other month.

At the end of the course, the student must write a report of the training, external internships and the achieved clinical and theoretical skills. After the tutor has signed the report it is sent to the steering committee of NUBA.

The student must participate in all 3 mandatory theory modules.

It is expected that the student actively participates in his or her own training course.

It is expected that the student communicates his or her knowledge about paediatric anaesthesia to the rest of the staff at the place of employment.

Obligations of the training site:

The training site should aim at, in cooperation with the steering committee of NUBA, to compose and coordinate the training so that it covers all the fields within paediatric anaesthesia.

The training begins September the 1st and lasts until August the 31st.

The training site is obligated to offer a training place of one year duration full time.

The training site appoints a tutor whose job it is to supervise the student in clinical paediatric anaesthesia during the stay.

The tutor must be a nurse anaesthetist with several years of experience in paediatric anaesthesia and be well anchored in the clinic. The tutor and the student are responsible for evaluation the training course.

Expenses in relation to Nordic Training in Paediatric anaesthesia for Nurse Anaesthetists (NUBA) are held by the place of employment.

Obligations of NOSAM:

NOSAM offers Nordic Training in Paediatric Anaesthesia for Nurse Anaesthetists.

At the end of the training, NOSAM issues, in cooperation with NUBA's steering committee, a training certificate which expresses that the student has fulfilled the clinical and theoretical aims which are determined for the training.

Obligations of NUBA's steering committee:

- has the responsibility for coordinating and arranging the practical framework of the training, coordinate the enrolment and make sure that the student fulfils the goals of the training before issuing the training certificate.
- help the student if any problems should appear during the training.
- plan and hold 3 theory modules of 3 days duration. The theory modules are arranged and held in turn by the participating countries.
- in cooperation with the training sites: make sure that the student is given the opportunity for an internship at another anaesthesia department in one of the Nordic countries
- has the responsibility of the training programme and contract along with a training certificate.
- approve the external internship.
- work as a sparring partner for the tutor and the training site

Training certificate:

The student must have fulfilled the goals of the clinical training.

External training courses must be completed.

The student must have participated in all 3 theory modules.

If the student does not fulfil the requirements during the duration of the course, the evaluation must be done by the steering committee.

In the case of illness lasting more than four weeks, it is up to the steering committee whether the internship should be equally extended.

Participating Nordic hospitals:

Rigshospitalet, Copenhagen

Odense University Hospital, Odense

Aarhus University Hospital, Aarhus

Oslo Universitetssjukhuset/Rikshospitalet, Oslo

Karolinska Universitetssjukhuset/Astrid Lindgrens Barnsjukhus, Stockholm

Sahlgrenska Universitetssjukhuset/Drottning Silvias Barn- och ungdomssjukhus, Göteborg

Lund University Hospital, Lund

Economy:

The economy will primarily consist of labour costs for the student. In addition, the place of employment is obligated to cover expenses in connection with external internships and theory modules.

The expenses connected to the external internship will be transportation expenses and the stay (according to the politics of the department).

The students will be in training during many anaesthesia and thereby extra in the operating theatre. It will also be necessary to make time for reflection with the tutor and for teaching at the clinic.

The course fee in connection with the 3 theory modules is 1500 euro which includes lunch, coffee/tea and cake, expenses for lecturers, room rental, simulator training, etc.

Signatures:

Student _____ date: _____

Representative for NUBA's steering committee _____ date: _____

Head of the department of employment _____ date: _____

Appendix

Theory modules

The theory modules cover the following subjects which will be presented by specialists within the respective areas and by the individual students. The teaching will be a mixture of lectures, group discussions workshops and simulation training. The subjects must be presented on the basis of the newest evidence of the area.

Two of the theory modules prepare a subject for presentation for the rest of the students and teachers. The presentation is expected to last about 20-25 minutes. The subject is decided beforehand by NUBA's steering committee and be related to the other subjects of the theory modules.

Module 1: Basic Anaesthesia (September):

Paediatric anatomy/physiology

The paediatric airways plus including handling of the difficult airway

Paediatric pharmacology

Anaesthesia

- induction methods, maintenance and closing of anaesthesia, closing anaesthesia
- fluid - and blood component therapy pre/per/post
- Temperature regulation
- Pain treatment (including regional techniques)

Pre per and post preparation (psychological, educational)

Pre per and post nursing/care

Module 2: Humanistic/ethical seminar (January):

Treatment of parent/child

Children's psychology (age characteristics/developmental psychology)

Abuse

The dying child

Belief

Ethics (train ethical analysis)

Legal aspects (accidental events, failure treatment etc.)

Awareness in children incl. monitoring

Simulation training (team work/reliable communication, neonatal and paediatric resuscitation)

Module 3: Specialised anaesthesia (end of May/beginning of June):

Anaesthesia for special diseases/syndromes

Anaesthesia for children with heart/lung diseases

Trauma fire damage drowning

Anaesthesia outside the operation theatre/transport of severely ill children

Anaesthesia for premature and neonatal children

Research and the future

Quality assurance of paediatric anaesthesia (check lists, safety procedures, reporting events etc.)