## VISIT TO CHU BRUGMAN, BRUXELLES MARCH 2019



I have been working at the intensive care unit at the University hospital of North Norway, Tromsø since 2002. I finished my intensive care education in 2004. Since 2011 I have also been working as a flight nurse in the ambulance plane in Tromsø.

My wife worked in Bruxelles for the period September -18 – June -19, I visited Belgium several times in that period, and I wanted to take the opportunity to visit an intensive care unit at one of the city's hospitals.

Through EfCCNa's homepages, I found their "Exchange programme"

https://www.efccna.org/education/exchange-programme and contacted EfCCNa's Norwegian international contact person Mathilde Christensen who contacted Belgium's international contact person Arnaud Bruyneel. He suggested some hospitals from which I could choose. However, some of the hospitals had an absolute demand that I could speak French, one of the official languages in Belgium – which I do not. Nevertheless, I finally ended up at CHU Brugman where Yves Maule made an excellent schedule for me for an interesting week.

CHU Brugman is located at 3 different sites within Bruxelles, and I was fortunate to visit two of the sites.

For two days I stayed at the intensive care unit at CHU Brugman, Horta. Nice and dedicated nurses who showed me their ward, their routines and shared their experiences welcomed me. The staff was united and supportive, and despite the workload, they seemed to be enjoying their work, performing it skillfully and professionally.

This ICU at Brugman, Horta is a general medical-/surgical ICU divided in two different wards apart from each other with 12 beds each. They do not receive neurosurgical patients or children.

The biggest difference from my ward in Tromsø is probably the nurse – patient ratio. In a unit with 12 beds, they are staffed with 5-6 nurses at daytime and 4 at night. Each nurse may have 3 patients depending on the patient, but they experience that they may have an ECMO-patient, and another patient in addition to that. In my unit, we have a 1:1 nurse-patient ratio, and always 2 critical care nurses with the ECMO-patient an with children.

Documentation is also different from my unit. We have our digital system (DIPS) with all patient documentation within one place in addition to the vital observations on paper where we also get ordinations for medicines and goals for treatment such as blood pressure, sedation depth etc. Brugman has a digital tool, "bDoc", for laboratoty and to document treatment of wounds. They fill in a form with vitalia in numerical values every two hours. The form also contains registration of measures / observations concerning respiration, circulation, elimination, hygiene etc. They do not make written reports except by special occasions.

They use Nursing Activity Score(NAS), and they do this digitally on every shift. When all patients are scored, they get a total score that shows the actual staff demand. This shows whether the ward is adequately staffed on a day-to-day basis.

The unit has a nursing assistant who helps the nurses with patient related tasks such as bed baths etc. They also have a logistic assistant who supplies the ward and the rooms with single-use equipment and linen – and cleans used medical equipment.

The dayshifts lasts from 7 am to 3 pm, some may also have 12-hours shifts (voluntary) from 8 am to 8 pm or 7 am to 7 pm. The late shifts lasts from 1 pm to 9 pm, so there is a 2 hours overlap between day and late shift. This time is used for tasks that require more hands, such as transports to the radiology department. The night shift lasts 12 hours from 8 pm to 8 am. At my unit, there is a 30-minute overlap entirely used for reporting.

I presented our ICU and the ambulance plane service for some of the staff, and from the feedback, I think that some of them would like to work with us – especially considering the nurse-patient ratio. However, despite the workload, I would like to work with the Belgian nurses myself, especially regarding the unity and support they showed each other.

I spend one day at one of Brussels fire stations where they have big 112-call center. Belgium has a common emergency number for fire and ambulance: 112 (police 101). This is a cooperation between the fire department (municipal) and health department (national).

Brussels has approximately 1,2 mill citizens. The call center takes 440 000 calls a year of which about 40% are real incidents – 85% of these are medical and 15% fire.

Day 4 I was at the emergency department at CHU Brugman, Paul Brien site – the second of the 3 Brugman sites. The nurses there receives all patients who comes, and makes a triage. They take the patients vitals and give them a priority: BLUE(can wait 4 hours), GREEN(can wait 2 hours), YELLOW(can wait 1 hour), ORANGE(can wait 15 min) or RED(can not wait). They also take care of patients who gets a bed at Low-care(11 beds) or High-care(4 beds).

This emergency department receives more than 100 patients per 24 hours. People come here with all kind of conditions, including the ones with which we would see our general practitioner.

Brussels has 28 stretcher ambulances (staffed with fire officers), 3 PIT-ambulances (staffed with paramedics) and 8 SMUR-ambulances (Service Mobile d'Urgence et Reanimation = Mobile Emergency and Resuscitation service) staffed with a doctor and a critical care nurse. The SMUR-ambulances are equipped to maintain advanced life saving and treatment.

The patients are delivered to 16 different hospitals depending on distance, capacity and level of care and treatment required.

The last day of my week there, I followed a SMUR-ambulance on a 12-hour shift. We were sent on 5 different assignments:

- Man with diabetes who were found at the street with low consciousness and low blood sugar
- Old woman at a care center with respiratory problems and sepsis
- 3 weeks old baby with respiratory problems
- 10 years old boy who was hit by a ball in the head in the school yard, and who did not respond adequately afterwards
- Old man at a general practitioners office with a heart attack

I will most definitely recommend the exchange-programme. Having insight in other work cultures is most rewarding and raises awareness to the work in your own unit.

Start the process early. Make your self an opinion on what you want from the exchange. Prepare a presentation of your own unit. Show photos and statistics on the population you serve and average

days admitted, days on ventilator and such. This is always interesting to others with similar work and makes a basis to compare. Remember that this is an exchange – and it works both ways.

Talk to your colleagues before you go on an exchange, to find out what do we want to know? How do others solve their challenges? What are their procedures on different tasks? It is always interesting to know how others approach issues, and are their approach different from ours?

I would like to thank EfCCNa who has this exchange-programme, and their national contact persons Mathilde in Norway and Arnaud in Belgium. You make it easier to take the first step and start the process. I would also like to thank Yves Maule who made my schedule and arranged a very interesting week for me – along with all the nurses, I met in the different sites in Brussels and gave me a good insight in the critical- and intensive care service in Belgium. Thanks to my own unit who gave me the days off. Last, but not the least, I would like to thank my wife, Elisabeth, who has made It possible for me to get to know Brussels and Belgium, and to implement this exchange.