From Himalayas to Arctic Circle: Pre-Hospital Care in Nepal and Norway
Elective Report by Anna Schumann, CGCM, Wolfson College

My passion for humanitarian-, expedition- and pre-hospital emergency medicine motivated me to explore different environments and healthcare systems on opposite ends of the spectrum for my medical elective. I therefore split my elective time into several parts.

I first flew to Nepal, where I worked in the Emergency Department of Dhulikhel Hospital near Kathmandu, which gave me a solid introduction to Nepali hospital-based emergency medicine. During my week at Dhulikhel Hospital I saw a variety of traumatic fractures, diabetic emergencies many acute cases typically seen in this country. The most memorable patient I recall was a 16-year old girl who was 34 weeks pregnant and was brought into hospital for attempted suicide. She had taken a large dose of organophosphates, which are freely available in Nepal. This young patient fell pregnant after being raped and overwhelmed with the stigma of extra-marital pregnancy. As this case had highly interesting medical, cultural and ethical implications, which sadly exceed the scope of this report, I found it the most memorable and fascinating.

For a long time I have been curious to get involved with medical aid work in the future; therefore, to gain some real-life experience of what working with an organisation such as MSF may be like, my urban placement at Dhulikhel Hospital was followed by an internship at Tamekoshi Hospital in Manthali, which lies in the rural Ramechapp District. Here the population is still dealing with the aftermath of last year's devastating earthquake and medical resources are greatly limited at best or non-existent at worst. For the first week I spent some time on site of Tamekoshi Hospital helping to run outpatient clinics for locals and people for farther away that were well enough to walk for days to attend this clinic. Tamekoshi receives financial donations and volunteers from the German Rotary Club and UNICEF on a regular basis and therefore is equipped with some basic medical facilities including an X-Ray machine, a small laboratory, a dental treatment room, 15 inpatient beds and a small paediatrics ward. My most memorable case at this hospital was an emergency Caesarean section, during which I was asked to assist. This was carried out by the On-Call General Practitioner, who is one of two permanently employed doctors of the hospital and also runs the tiny 24-hour A&E department. Further cases at Tamekoshi I found striking included a child with measles (a disease I had only seen in textbooks), a case of severe childhood tuberculosis and a woman who presented with increased appetite for dirt, which turned out to be a pica-type craving due to severe iron-deficiency anaemia secondary to hookworm infection.

In addition to helping with outpatient clinics at the actual hospital, myself and two other UK volunteer doctors helped Tamekoshi’s medical chief Dr.Suman to run remote health-camps on the weekends. These involved driving out to local villages by jeep with as much medication as possible and then seeing several hundred patients per day, most of which rarely get the chance to see medical staff during their lifetime. The consultations were carried out with severely limited clinical resources and only rudimentary knowledge of the local language; therefore treatment was completely

symptom-based, rather than focussing on elaborate diagnoses, that could neither be confirmed with any tests nor followed up adequately. What I enjoyed about this was the necessity to make decisions based only on clinical diagnosis, which is considered a crucial skill in expedition medicine; however I occasionally found myself frustrated with the repetitiveness with patient complaints and the absence of opportunities to treat acute illnesses, as patients in such remote locations either succumb to these or recover before medical attention arrives.

After experiencing Nepali pre-hospital care I set off to travel back to Europe and headed into the midnight sun; 350km north of the Arctic circle to Norway's northernmost hospital at the island of Tromsø. I decided that a placement in Scandinavia, which is known for its world-leading healthcare as well as its extraordinary remote medical services would be a perfect contrast to healthcare (and temperatures) in rural Nepal. From my previous experience with Critical Care Emergency and Pre-Hospital teams in Europe, I learned that skills in anaesthesia are crucial for any pre-hospital doctor. Therefore, I started off by joining Tromsø Hospital's Anaesthesiology and Critical Care Department, where I was warmly welcomed and integrated fully into the medical team, thanks to the friendly and multi-lingual staff and patients. I got daily practice in inserting IV-lines, placing airway adjuncts, performing common air way manoeuvres (which I learned quickly look a lot easier than they really are), pain management, appropriate ventilation and intubation as well as different kinds of regular and rapid sequence induction.

My last week on elective was spent with the Norwegian Air Ambulance HEMS Team, which I had successfully arranged after long negotiations. This was the highlight of my placement. For several days I got to work with the HEMS duty doctor, rescue man and pilot who fully integrated me into the team; during my time there I got to see the base and dispatch centre, attend morning video-conferences with other remote bases and most excitingly, got to join several missions across the vast fjords of Norway and Finland. While I was there the team was called out for two search&rescue missions, two critical care inter-hospital transfers, two remote transfers of cerebral accidents and one homicide. I absolutely loved every minute of being part of this incredible medical team and watching them work in sync and with calm under pressure; with discipline as well as enjoyment and empathy.

I believe that we often forget how privileged we are within Western healthcare systems: it may sound like a cliché, but it is true. The opportunity to contrast emergency, critical care and rural medicine in a developing country with developed Western anaesthetic medicine at opposite ends of the world (and temperature scales) was a great privilege for me. To ensure safety for my future patients, I want to make sure I am adequately trained and have confidence in the bread and butter skills of clinical medicine and anaesthetics, whichever country or environment I may end up working in during my future career. My placement in Norway allowed me to increase my knowledge competencies needed in Anaesthetics while my time in Nepal refreshed my appreciation for Western medicine and passion for humanitarian and pre-hospital care.

I would encourage other medical students to get creative, 'pick-and mix' their future electives and contrast different health care systems. I would relish the opportunity to share my experiences with anyone who would like to hear about them.