My 10 week medical elective was spent with the International Porter Protection Group (IPPG) at their Rescue Post and Porter Shelter at 4450m in the village of Machermo, which is in the Everest region of the Nepalese Himalaya.

IPPG

In 1997, a young Nepali porter employed by a trekking company became severely ill with altitude illness. He was paid off and sent down alone. It took just another 30 hours for him to die. He was 20 years old and left behind a wife and two small children... IPPG was formed to prevent these recurring tragedies.

Mountain porters face many occupational health and environmental hazards. IPPG recognises this and the poor treatment of this vulnerable group - they work to improve the conditions of mountain porters worldwide. IPPG’s mission is for every porter to have: ‘access to adequate clothing, boots, shelter and food (appropriate to the altitude and weather); medical care when ill or injured; and insurance’. The Porter Shelter and Rescue Post at Machermo is a joint project between IPPG, Community Action Nepal, The Sagamartha National Park and local villagers who make up the Local Management Committee. The Rescue Post is run by IPPG volunteers during the trekking seasons (March-May and September-November). The post offers shelter and free medical care to porters. Trekkers are also treated at the post for a fee and it is these fees, together with donations, that allow the charity to function and to treat porters for free. The volunteers at the post give a talk each day about porter welfare and altitude illness to trekkers currently staying in the village with the aim of increasing awareness and understanding of these issues. IPPG also works with a number of other organisations to promote the occupational welfare of porters, including Community Action Nepal, Himalayan Rescue Association and Kathmandu Environment and Education Project.

Medical elective

My learning objectives for my medical elective included:

1. Gain a deeper understanding of the occupational health problems faced by mountain porters.
2. Learn in general about Occupational Medicine in Nepal and the challenges of introducing Occupation Medicine in a developing country.
3. Increase my knowledge of the presentation and treatment of altitude illness.
4. Increase my experience of living and working in remote wilderness environments.
I arrived at Machermo after a beautiful (and breathless!) seven day trek in from the mountain airport at Lukla. My roles at the Rescue Post included carrying out consultations with sick porters and trekkers, helping to give the daily talk to trekkers about altitude illness and porter welfare, collecting data regarding altitude illness and helping with the seasonal maintenance of the Rescue Post.

In terms of medical treatment, we saw 129 patients during the season – half of these were trekkers and half were Nepali locals and porters. Half of our patients had altitude-related illness (acute mountain sickness, high altitude cerebral oedema and high altitude pulmonary oedema) and the other half had a range of problems including gastritis, gastroenteritis, minor trauma, respiratory infections and various ophthalmology and dental problems. During the season, seven patients were evacuated by helicopter. These evacuations were for high altitude cerebral oedema and/or high altitude pulmonary oedema.
Porter Shelter and Rescue Post with Kyajo Ri in the background

March-May 2014 IPPG volunteers with IPPG staff Chhewang (manager) and Kanchha (cook)
Occupational Health of mountain porters

A key part of my elective focused on the Occupational Health of porters. Mountain porters face many occupational health and environmental hazards. Indeed, porters suffer from more illness and accidents than Western trekkers. They are exposed to a number of environmental hazards, including high altitude and the cold, which puts them at risk of altitude illness, hypothermia and frostbite. The risk of problems arising is accentuated by their lack of adequate clothing and footwear, lack of shelter, lack of sufficient food and lack of appropriate medical care. In terms of accommodation, sometimes porter may be able to stay at the lodge with their western trekking group but only if the lodges are not full with trekkers and they will have to pay a large proportion of their wage for this shelter. The reality is that lodges are often full and porters have no choice but to sleep out in caves; caves used as such are regularly passed along the main trekking trails. Thankfully, in some villages there are now dedicated porter shelters, such as the IPPG porter shelters at Machermo and Gokyo. Regarding porter injury and illness, the risk of this is increased by the unbelievably large and heavy loads that many porters carry on a daily basis. It is unfortunately not uncommon for a porter to carry far beyond the 30kg limit that IPPG recommends; and, if this were not arduous enough, they will be walking perhaps 30km in a day, at high altitude, wearing a pair of flip flops for footwear – a task that most of us couldn't even consider doing at sea level with all the latest outdoor kit. Indeed, throughout the
seasons we saw many examples of porters with inadequate clothing and footwear – watching porters carrying loads many times their size wearing a pair of flip flops was an almost daily occurrence.

In terms of altitude illness, it is often not appreciated that most trekking porters are not Sherpa (the indigenous people of the highlands who have some genetic protection against altitude illness). Whilst most of the high altitude porters working on Everest itself are indeed Sherpa, in fact most trekking porters come from the lowlands and ascend to work during the trekking seasons. This means that they are just as susceptible to altitude illness as you or I, particularly at the start of the trekking season when they are not yet acclimatised.

An additional problem for porters is that a large number of them do not have insurance, particularly those who work independently rather than for a trekking company. This leads to problems if they fall ill – a western trekker who presents to the Rescue Post with severe altitude illness would likely be evacuated by helicopter; however, this quick and effective treatment is not an option for a porter without insurance. Instead, often the only option is to make the multi-day journey to lower altitudes on a yak or on the back of a fellow porter. In addition to the above, there is no social security in Nepal. This means that if a porter is unable to work or, in the worse case dies, their family and dependents are left in a very difficult position. In relation to this, during the season at the Rescue Post, on 18th April a fatal avalanche happened on Mount Everest. This was the most deadly disaster in Mount Everest’s history with 16 porters losing their lives. Many articles have been written about this disaster with many points of view expressed and it is not possible to discuss it in detail here. However, a key issue raised is that of insurance – the desperate need for wide spread, comprehensive insurance amongst porters. It is hoped by many that in the wake of the 2014 disaster this may become a reality, but it waits to be seen whether this will be the case.

A porter carrying a load
All of the above illustrates the demands of working as a porter and the difficulties faced on a daily basis. During the season we interviewed a number of porters to discover their stories and how they feel about life as a porter. The following are typical examples:

Karna Rai, 20 years old: “I am from Gudel-9, in the Solu-Khumbu valley. I have been portering for 4 years. I am not married. I live with my mother and father, my two younger sisters and two younger brothers. My siblings are all still at school. I finished school this year, and am currently waiting for my exam results. My parents run a farm at home, and I am portering to give them money to pay for my siblings’ school fees. It costs 1500 rupees per month in total for their school fees. I don’t like portering, but there is no other job available to me. Sometimes I suffer from altitude problems, and it is cold and expensive living up here. If I don’t get good tips then I don’t make a profit.”
Ganesh Tamang, 50 years old: “I come from Kaku-4, Solu-Khumbu, two days’ walk below Lukla. I have been portering for 10 years. At home I have a wife and five sons aged between 23 and 35. My sons have all finished school now and work on the farm. My eldest son is married and he and his wife live with the rest of my family. None of my sons work as porters. I used to porter in order to educate my children, but now I am working to earn enough to run the home and feed the family. I don’t like portering, but I have no other option for a job. Working at high altitude is expensive. This season I am carrying 35-40 kg, which is a lighter load than in previous seasons. I work for the same company every season, and earn 1000 rupees per day.”

From the 20 porter’s stories that we gathered a number of themes emerged. Porters generally do not enjoy portering – carrying heavy loads in cold, high altitude environments is hard work. Most porters are working as porters solely as a means to an ends – for example, to support their children through school or as vacation work to pay for their own school fees. Life in the Everest region is expensive so a large proportion of a porter’s wage is spent on living costs - this means they are very reliant on tips from trekkers to make any profit at all.

In terms of the medical problems of porters, during the season we treated a number of porters at the Rescue Post. A variety of illnesses were seen including altitude illness, respiratory infections, gastroenteritis, wound infections, back/neck pain and snow blindness. Conditions that were particularly poignant, especially in terms of occupational involvement, were infected scalp wounds from abrasion by the head strap that porters use to carry their loads, severe (and sometimes infected) blisters resulting from inadequate footwear, excessive loads and poor access to washing facilities and snow blindness because of a lack of sunglasses. In addition, we saw many cases of altitude illness in porters who had ascended too fast and who had been placed at additional risk due to the exertion of carrying excessively heavy loads. Furthermore, many porters were significantly unwell (for example, with altitude illness and respiratory infections) but they were unable to rest and take time off work to recover because if they didn’t work they wouldn’t get paid and their trekking companies had strict itineraries to stick to and would carry on without them.
In summary, it is clear that Nepalese porters face many occupational health problems. There is currently a lack of centralised national systems in place to protect porters and promote their welfare. The main independent forces acting to improve porter welfare are charities working in the region, such as IPPG. In terms of occupational health medicine in Nepal as a whole, there is evidence of the emergence of this field within in Nepal; however the health of porters is rarely discussed despite their vital role in Nepal’s tourism industry. Looking to the future it is important to continue to increase trekkers’ awareness of porter welfare, which will hopefully result in trekking companies giving their porters better working conditions such as adequate clothing, footwear, accommodation, medical care, insurance and pay. Porters are the backbone of the trekking industry, which is a vital part of the Nepalese economy – we can but hope that the government will truly acknowledge this and that their involvement and regulation may also act to improve porters’ working conditions in the future.

Overall, I thoroughly enjoyed being part of the fantastic work that IPPG do and I feel extremely lucky to have been able to spend my elective in the Himalayas with the wonderful Nepali people. I achieved my learning objectives and have learnt a great deal, in particular about the occupational health problems of mountain porters and about altitude illness. I would like to thank the Faculty of Occupational Medicine for the Mobbs Corporate Health Fellowship funding that I received - your support was invaluable.

For more information on porter welfare and the work of IPPG please visit www.ippg.net