

Arav Gupta – medical elective in South America, summer 2016

My medical elective took me across 4 countries on one continent: South America. Having done Spanish at A Level I was keen to rekindle the Latin spirit and visit this amazing continent for elective.

One of the beautiful things about the Andean countries of South America is that they pack an incredible diversity of landscapes into a relatively small geographical area. To make full use of this amazing corner of the world, I decided to split my placements into three, doing two weeks of tropical humanitarian medicine in the Peruvian Amazon with a British charity, two weeks of mountain trauma in the Chilean Andes and finally a fortnight in a workers' hospital in Santiago, the Chilean capital.

The idea behind the four weeks in Chile was to explore a budding interest in altitude medicine, both due to love of the mountains and due to the opportunity it provides to put some basic cardiothoracic physiology in context. To begin with, I attempted to gain some personal experience at altitude by climbing Huayana Potosi in Bolivia. This 6088m peak was certainly the most physically demanding challenge I have attempted and in reaching the top, I got a real feel of the effect hypobaric conditions had on me, including hyperventilation, disturbed sleep, headaches and of course extreme cold!

My first two weeks in Santiago were spent in El Hospital de Trabajador in the occupational health department. Here I spent time observing evaluations of miners before they go to work at altitude and the conditions that they return with. One particular evening stood out in this placement: I had the opportunity to spend a few hours with a physician who has carried out extensive research on the sleep quality of the mining population at altitude. As well as feeling pleased about being able to discuss research in a foreign language, I enjoyed learning about his research and gaining a more in depth understanding of sleep physiology at altitude. I was also required to make a presentation for my department at the end of the placement and spoke about the doctor's research for 15 minutes in Spanish, which for me was an accomplishment!

Following this fortnight, I headed up into the mountains for two weeks in two ski resorts. Each resort had a small private clinic that would attend to those injured in snow sport accidents. Resources were of excellent quality but limited to basic aid. There, I spent time with the radiographer taking and interpreting various x-rays as well as with the doctor taking histories and applying splints and casts. On a couple of occasions, I was even drafted in as resident translator! As well as this, I had the chance to accompany a helicopter evacuation into Santiago of a patient with a neck injury. This was obviously very exciting and a completely novel experience for me. To top this great experience off, there was plenty of time to ski and enjoy myself on the slopes too - with a helmet of course!

To experience a totally different flavour of medicine from high altitude, I spent a fortnight in the Peruvian Amazon with the Vine Trust, a Scottish charity. They are an excellent charity who in Peru, run a programme called the Amazon Hope. This is a large boat that sails up the major tributaries of the Amazon, stopping in remote villages and providing free medical and dental care to residents who otherwise wouldn't get it. Patients arrive aboard the moored ship for a clinic where we offer consultation, examination and treatment. In some cases, minor surgery could be offered. For me this was a fantastic experience as it gave me the chance to independently see patients and develop their management plans in a resource poor environment.

Overall my elective provided a really varied experience for which I am very happy. In my Santiago placement I definitely expected more hands on experience than the mainly observational role I played. However as always the language practice was invaluable. By splitting the placements up and

having time in between, I managed to travel and see as much as I could in the time that I had, including a hop to Rio de Janeiro pre-Olympics and trekking in the high Andes.