An Elective in Christian Medical College (CMC), Vellore, South India

Shalin Abraham

I spent 7 weeks in the Christian Medical College, Vellore, a mission hospital, top-ranked medical school and not-for-profit organisation in Tamil Nadu, South India. I applied for this elective to gain clinical experience in a different health system to the UK. The Indian health system is a two-tier one, where most healthcare provision is private, but public ‘government’ hospitals and mission hospitals serve those who cannot afford private care. CMC Vellore is a nationally renowned referral centre in India, which has private patients for the richer demographic. The fee these patients pay, along with external donations, is used to subsidise cost for poorer patients, even providing completely free care for some. Vellore is a dusty market town surrounded by hills which shades it somewhat from the fierce heat. It has become the unlikely pilgrimage site for a variety of people seeking excellent healthcare, from movie-stars to farmers.

CMC Vellore was founded in 1900 by Dr Ida Scudder, a daughter of an American missionary, who initially wanted to improve medical care for women and children in India. Her motivation to serve is fundamental to CMC’s vision, encapsulated in their motto ‘not to be ministered unto, but to minister’ and the strong sense of duty held by the doctors. Doctors are also paid a relatively small salary. Despite this, CMC attracts patients and professionals from all over India because it is a centre for clinical and academic excellence. It performed...
the first successful open-heart surgery (1961) and the first bone marrow transplant (1986) in India. It is also the home of the South Asian Cochrane Network and Centre, Stem Cell Research Centre and Infectious Diseases Training and Research Centre.

CMC has been seeing an increasing patient load over the years, due to the expanding Indian population and improvements in access to healthcare and health awareness. In one day at CMC, there are an average of 8830 outpatients, 2133 inpatients, 177 operations and 52 births. Nearly 10,000 staff members are employed. As well as the main hospital, there is a primary healthcare network made of Community Health and Development (CHAD), which serves a rural, semi-urban and tribal population; Rural Unit for Health and Social Affairs (RUHSA) serving a rural population; and Low Cost Effective Care Unit (LCECU), serving mainly the urban slum areas in Vellore. LCECU and CHAD have small community hospitals, and RUHSA has a 70-bed secondary hospital. All run mobile clinics in their respective catchment areas.

I wanted to carry out my elective in this institution for a wide exposure to multiple specialities, from community medicine and public health to super-specialties. It was also an interesting period in Indian healthcare: there was a rising demand for emergency medicine, a still-establishing speciality in India, and besides diseases of poverty, increasing disposable income and a rapidly expanding economy has led to a rise in non-communicable disease and traditionally ‘western’ morbidity. I also hoped to see how CMC dealt with an enormous case load and if there were transferrable initiatives that could be relevant in an increasingly pressured NHS. In my past year, I had seen the morale in NHS drop and was keen to find out what motivated the CMC doctors to keep working, as they are well-known to work long hours for relatively little pay.
I had placements in neurology, internal medicine, community health, medical oncology and haematology. I hoped to be able to clerk patients, be integrated into ward life, attend teaching sessions and undertake practical skills. I have also been considering neurology and oncology as potential specialities, so wanted to explore these interests further.

In many ways, the placement met my expectations and exceeded them. I saw cases of advanced and multidrug resistant TB and observed the operation of the DOTS programme (directly observed treatment short course), where TB drugs are provided by the government and compliance observed by community health workers. Interestingly, I saw a case of TB optic neuritis causing visual loss. Other infectious disease cases included AIDS with miliary TB, Dengue fever, scrub typhus and pulmonary nocardiosis. In my neurology placement, I saw many cases of venous sinus thrombosis, motor neurone disease, Guillain Barré syndrome, myasthenia gravis and hypoxic ischaemic encephalopathy secondary to hanging. I also saw a case of labyrinthine artery stroke causing sensorineural hearing loss. My time with the paediatric neurology team was particularly interesting, as I saw cases of neuroregression and seizures secondary to lipid storage disorders, mitochondrial diseases and Wilsons disease, with Kaiser Fleischer rings. In medical oncology, I saw cases of advanced cancer, most of which were palliative. Cholangiocarcinomas, gastric cancer, oral cancer and breast cancer seemed to be particularly prevalent. In haematology, I spent time in the bone marrow transplant unit and saw the complications of bone marrow transplants, including severe graft versus host disease and CMV infection. On the wards and in clinics, my role was very much an observership. I was able to speak to and examine patients, but language was a barrier. Although I speak Malayalam, a language similar to Tamil, many patients came from North India and Bangladesh speaking Hindi and Bengali, which I couldn’t understand. I feel like my examination skills have been honed, as Indian doctors have to examine patients quickly and efficiently with less reliance on laboratory tests. I also did integrate into ward life, attending numerous teaching sessions with medical students, journal clubs and grand rounds.
There were some challenges however. On some wards, I found it hard to integrate into the team due to the strict sense of hierarchy that is still prevalent. Consultants in these teams were feared by junior doctors, who would spend a lot of time preparing for rounds, and medical student teaching was very much a low priority. In some clinics, each doctor would see 40-50 patients per day, with multiple doctors in one room. Therefore, in oncology clinics, patients would often overhear doctors breaking bad news of terminal diagnoses, a stark contrast to the adherence to the principle of confidentiality we have here in the UK. Furthermore, the patient-doctor interaction is still very paternalistic and medical education is mostly didactic. Whilst this is advantageous for high speed consultations, in the long term it creates a dependency on health professionals. For example, in internal medicine, I saw patients who had travelled for days to get a clinic appointment for primary health presentations and chronic disease management. In a wider sense, this represents some issues in India’s health infrastructure. Quality of healthcare provision is still poor in some areas of India like Bangladesh and West Bengal, and with no formal primary to secondary care referral system, ‘health tourism’ is common, which has led to an increasing patient load in large tertiary hospitals with good reputations like CMC Vellore. Other aspects that were particularly challenging included the 40-degree heat with no air conditioning that patients and healthcare professionals tolerated (unsurprisingly many patients were dehydrated) and unannounced power-cuts which inactivated fans and lights, making clinical procedures a little tricky!

However, in exceedingly more moments, my elective surpassed expectations. Seeing some doctors work till 2am and still come in the next day for the morning ward round with a smile on their face, ready to start a ward round with 50 patients, defied belief! The doctors appeared to be driven by a strong sense of duty, faith, clinical excellence and loyalty to the institution and what it stands for, as many had studied there. Due to the immense case load, the doctors were some of the most clinically competent I had ever met, which allowed them to deal with patients quickly and efficiently. Doctors could interpret difficult clinical signs, radiology scans or test results, and rarely had to call other specialities for advice. My favourite team was oncology, where the hierarchy between senior and junior doctors was far less apparent. The team supported each other and it made a huge difference to the learning environment and patient care.

I particularly loved the community medicine part of my placement. Here I saw true examples of low cost and holistic care. RUHSA hospital has a community college and goat farm, run by female self-help groups. The profits for this are invested into the community and hospital, an example of how poverty reduction, education and community empowerment can improve healthcare. Community medicine doctors went into villages and engaged with the community, identifying key problems (alcoholism being particularly prevalent) and addressing them. The use of health volunteers from the community as
liaisons was particularly effective, as doctors could very quickly find out if there was a medical emergency or infection outbreak. I also saw innovative examples of health education, through plays, songs and artwork. Although time intensive, this engagement between doctors and the community is something the UK primary health care system could learn from, as it promotes trust and partnership while empowering patients. As CMC refuses to bribe the corrupt local government, they often faced barriers to service development, which was frustrating to hear about, and highlighted how important it was to value the transparency we have in the NHS.

There were so many memorable moments. I feel very blessed to have met inspiring doctors, nurses, patients and other elective students from all over the world. Climbing the local hill to see the sunrise and escaping the busy wards to have incredible 50p lunches on the hospital rooftop café were daily pleasures I will treasure. I saw amazing clinical signs, presentations and pathology in Vellore, but it was the human connections and compassion that transcended language and cultural barriers that I will never forget.
Typical lunchtime meal

View from rooftop café

Bagayam campus where I resided for 7 weeks

Outside the education centre where teaching was held