Interview

Consultant paediatric neurologist Dr Dipak Ram

Introduction

I'm Dr Dipak Ram and I am a consultant paediatric neurologist at Royal Manchester Children's Hospital. I am also the Royal College of Paediatrics and Child Health (RCPCH) National Training Advisor for paediatric neurology training. That involves overseeing the paediatric neurology training across the whole of the UK as well as recruiting new trainees into paediatric neurology posts across the country. This role also involves supporting the trainees currently in posts across the country and helping them transition to become consultants. Another role I have is the British Paediatric Neurology Association (BPNA) chair of the Cerebrovascular Interest Group and this involves chairing a group of clinicians and health professionals interested in paediatric neurovascular disorders and stroke and helping to improve the services across the UK.

What does a typical week as a paediatric neurologist involve?

Most paediatric neurologists will have a slightly niche job plan based on their area of expertise. I am predominantly a clinician so I am patient facing most of the time and I have on-call weeks where I am on site in Royal Manchester Children's Hospital and seeing patients which come through the door with various paediatric neurological conditions as well as emergencies. The referrals could come from the general paediatrics team, A&E, paediatric intensive care, neonatal intensive care, other specialties within the hospital, or district general hospitals. This is really exciting and interesting because I see a whole breadth of paediatric neurology conditions and keep learning on the job and coming across conditions which I've never seen before - so really fascinating work!

The on-call weeks are busy but full of learning as I mentioned, so it's always really rewarding. On non on-call weeks, the roles could be different for each paediatric neurologist but my role would be to do outpatient clinics which could be in Royal Manchester Children's Hospital or outreach clinics in District General hospitals where we sit with the local paediatricians and see cases together. This helps with the education of general/community paediatricians too. Other things during a typical week would be involvement in research. I am part of some clinical trials and do work for this as an investigator. Other roles part of my routine work include delivery of specialised services because paediatric neurology is really complex and there are so many subspecialties within paediatric neurology. I do some work with specialised services in demyelination/multiple sclerosis in children, Batten disease, metachromatic leukodystrophy, as well as the inherited white matter disease service in the UK. These specialised services are delivered as part of a multidisciplinary team to try and improve services for patients with these rare conditions across the UK.

There are a lot of opportunities for teaching and education for junior doctors and medical students, which I'm involved with as part of my role as a consultant. As you can imagine, the week is filled with lots of interesting and different cases and it's that variety which is what keeps me going.

What qualities make a good paediatric neurologist?

I think clear communication skills are really important because we deal with really complex patients and, sometimes, this involves breaking bad news to patients about rare diseases or neurodegenerative conditions. It is important to have very clear communication skills and also to be aware of how to build a rapport with patients and families. Another important quality is teamworking within an MDT, which I think is really integral because delivery of paediatric neurology services is always by a team. It is really important to be a team player and work well within an MDT. A lot of our work is delivered together with other health professionals. For example; specialist nursing staff, dietitians, occupational therapists, physiotherapists, speech and language therapists, community paediatricians, geneticists and trainees are frequently part of our MDT meetings. All of these people and many others are involved in MDT working and it's very important for paediatric neurologists to work well within the team, but to also have leadership skills so that you that we can make sure that we make a robust MDT decision with a patient-centred approach.

When did you decide to become a paediatric neurologist?

When I was doing an SHO rotation in paediatric neurology, I completely fell in love with the specialty! It was so unique and interesting, and I realised that my consultant was still learning on the job despite being a paediatric neurologist for over 20 years. I remember being told that paediatric neurology is an ongoing and continuous learning experience and I thought to myself: this is exactly what I want to do! Every patient is completely unique despite them having the same condition and I think that's what makes neurology fascinating. When I did my SHO job, I remember there being many subspecialties within paediatric neurology, which intrigued me. For example: epilepsy, neuromuscular, neurovascular, movement disorders, neurogenetics and acquired brain injury. All these different areas were so exciting and there were so many innovations and new things happening in different areas. I was really interested to see how these advances were going to play out in the future. That's when I decided I definitely

wanted to be a paediatric neurologist and I applied for a training post thereafter.

How do you achieve a good work life balance?

I think this is really important! I'm a strong advocate for good work life balance. I think it is important to make sure that you have things to do outside work and not get too drawn into work, because that's always easy when there are so many exciting things going on. I find it easy to think about life outside work separately, so I keep busy by playing tennis and the usual things: music, movies and having time to socialise with friends and family. Part of achieving a good work life balance is having a good team to work with, so making sure that you have colleagues who can cover you whilst you are on annual leave so that you don't get drawn into work when you are on leave. I think that this is such an important thing and it's definitely achievable as a consultant paediatric neurologist, as long as you ensure that you are efficient with your work and make sure that you have colleagues who work well with you within the team.

Why should someone consider a career in paediatric neurology?

As I mentioned above, there are so many exciting things happening in paediatric neurology and I think the learning always continues. There are so many subspecialties within paediatric neurology itself, such as epilepsy, which then subspecialises further to the epilepsy surgery service, ketogenic diet service, and vagal nerve stimulator service for example. The same applies to other subspecialties, for example neuromuscular, cerebrovascular, movement disorder and other areas. I think if someone considers a career in paediatric neurology, they have so many options within paediatric neurology to subspecialise in. The other big reason to do paediatric neurology is that there are so many opportunities for research. If you're research orientated, there are so many things going on in paediatric neurology and there are many academic paediatric neurologists across the country who are happy to support trainees to blossom into academicians in the future.

In your career, what are some of the most impressive advances in medicine that you have seen?

Paediatric neurology has come a long, long way and we have seen many impressive advances over the past couple of decades or so. One of the most impressive advances has been in neuromuscular medicine where we now have treatment options for spinal muscular atrophy type 1 (SMA1), which was previously an incurable condition. In the past, without treatment, children with SMA1 would unfortunately die within the first year of their life. At present, we are using disease modifying treatment to try and modify the condition, which is really revolutionary. Initially, we started using Nusinersen, which is an antisense oligonucleotide, which is given via lumbar puncture at set intervals, which demonstrated good outcomes when affected patients received this treatment early. This completely modified a disease where children in the past would never be able to sit and have difficulties with breathing and passed away within their first year of life. Now, they are able to stand and walk, which is revolutionary! Following on from that, there has recently been Zolgensma which is a gene therapy being used to treat SMA too. This is a one-off intravenous gene therapy which is given to modify the condition and these children again have had really good outcome. Another revolutionary treatment recently has been Libmeldy, which is a gene therapy used for metachromatic leukodystrophy (MLD). This is a condition which was previously fatal and children with the classical form of late infantile MLD would normally pass away in the first 10 years of their life. Now, there is stem cell gene therapy available for this condition and again, this has modified the condition where these children are no longer rapidly deteriorating and instead, remaining very stable in general. As you can see, there are so many exciting advances and really impressive things going on in paediatric neurology!

What advice would you give medical students considering a career in paediatric neurology?

We really welcome medical students to consider doing tasters in paediatric neurology, because that would give you a good opportunity to see all the exciting things which are happening and also have an overview of what a life as a paediatric consultant neurologist is like. The other thing to do is to think about presenting at a conference. The BPNA conference runs every year in January and it would be good for you to speak to someone in your local paediatric neurology unit so that you can have an oral or poster presentation at the conference. The local team would be very happy to support you with all the research areas going on across the country. There is a recruitment champion in each paediatric neurology centre and there are trainees supporting this as well as consultants. Information for this can be obtained on the BPNA website.

What were the biggest struggles you faced in your first year as a doctor?

I think naturally, as you can imagine, the first year as a doctor is very much a 'rabbits in the headlights' feeling and I remember still feeling and thinking 'Can I really do this?'. After finishing five years of medical school, I realised that the biggest struggle you actually face is yourself! My take on it is that medicine is a lifelong learning process, so make sure you have a good support network inside and outside of work. Inevitably, everyone is going to have struggles as a doctor, but as long as you have good supervisors and a good support network outside of work, then I think the struggles that actually happen are a lot less than you can imagine them to be!

I am very happy to answer any questions. Feel free to email me at dipak.ram@mft.nhs.uk