

Report of my training at the Red Cross Children's Hospital Cape Town

I started my training in February, 2013 under the supervision of Dr. Priya Gajjar at the Red Cross Children's Hospital, Cape Town, South Africa. It was initially intended to be a six month hands on training. I received a six month sponsorship from IPNA and I am most grateful for that support. What was to last six months turned into a comprehensive paediatric nephrology training! Training lasted 18 months and I completed the subspecialty exam in paediatric nephrology and a MPhil dissertation on 25-hydroxyvitamin D status in children with moderate to severe chronic kidney disease at Red Cross Children's Hospital. I am extremely appreciative of ISN for funding 1 year of my training and for the African Paediatric Fellowship program for supporting the last six months of the training, including sponsoring my subspecialty exam and the MPhil.

During my training, I had the opportunity to manage children with diverse renal problems. The training had a well-defined structure, with subspecialty fellows first on-call for the nephrology team. There are daily ward rounds, twice a week renal clinics, and weekly dialysis meetings, nephrology-urology rounds, radiology/nephrology/urology meetings and transplant assessment meetings. There is also a monthly transition clinic with adult nephrology for patients moving to the adult unit. I was very impressed with the work ethic of the pediatric nephrologists at the hospital. They were readily available, knew all their patients by name and made learning fun despite the huge amount of work.

One clinic per week is for general nephrology follow-up visits and new referrals. The second weekly clinic is for kidney transplant patients. The spectrum of disease includes nephrotic syndrome, Alport syndrome, IgA nephropathy, lupus nephritis, Henoch-Schönlein purpura nephritis, nephrocalcinosis, HUS, nocturnal and daytime enuresis, CAKUT, nephronophthisis, cystinosis, renal cystic diseases, and Takayasu arteritis. Patients on chronic peritoneal dialysis are seen separately from other renal patients in a designated room on the ward. We inspect their catheter sites and review their treatment systematically, including their prescriptions and transporter status. There is a haemodialysis (HD) unit and the HD meeting occurs while the patients are receiving HD. I saw and managed acute complications of HD and adjusted HD prescriptions to ensure that the patients were receiving adequate dialysis. These meetings, coordinated by the nephrologists, are academically and clinically oriented. We also meet to discuss every renal patient seen in the outpatient clinic. We present the patients we see and outline our management plans; this process ensures we are optimising care and following guidelines.

I had the opportunity to insert a large number of acute PD catheters. I really enjoyed using Cook catheters and Kimal peel-away Tenckhoff catheters. It would be wonderful to be able to use soft catheters at home rather than rigid catheters. I also had excellent exposure to CRRT and plasmapheresis. I was trained in kidney biopsy and performed a good number during my training. We reviewed the slides with the histopathologist within 24-48 hours of the biopsy.

During my fellowship, I prepared patients for renal transplant and provided post-operative care, including managing complications. I remember with such clarity my first pre-emptive living related renal transplant! It was a "Wow" experience for me. I witnessed the normalisation of renal function, little or no complications, going home in less than one month and doing very well in follow-up clinic. I saw the turbulent management course for

some of the cadaveric transplant recipients, but any complications were managed well. Red Cross Children's Hospital does a minimum of ten kidney transplants per year.

Red Cross Children's Hospital is a major referral center and so it serves many patients. We often received telephone consults before subsequent referral to us. Our joint weekly ward rounds with the urology team was quite stimulating. We reviewed ultrasounds, MCUGs, and urodynamics reports; we then usually have a joint meeting with the radiologist. This experience enhanced my ability to interpret radionuclear scans, urodynamic results and other radiological imaging.

The ward capacity for renal patients is between 12-15, with monthly admissions ranging between 20 to 25 patients. I managed patients with nephrotic syndrome with difficult to treat edema, renal tubular acidosis, cystinosis, nephronophthisis, nephrogenic diabetes insipidus, hypertension from pheochromocytoma, neuroblastoma, and Takayasu arteritis. The daily consultant ward rounds enabled me to expand my knowledge and inspired me to complete the fellowship training so I would be able to offer better service to the children I would treat on my return home.

I was also involved in research. I presented at the 16th IPNA congress a poster on the efficacy of cyclosporine in HIV positive patient with FSGS. At the 17th IPNA congress, I had two posters: "Nephrotic Syndrome at Tygerberg Children's Hospital-15year Retrospective Review" and "Vitamin D status in Children with Moderate to Severe CKD at Red Cross Hospital."

Since returning from my training, I have been involved in setting up a paediatric renal unit at a private university teaching hospital where I run a clinic and teach nephrology and general paediatrics to undergraduate and post-graduate students. I improved my ability to care for children at my primary centre, the Lagos State University Teaching Hospital. We have one renal clinic with an average of ten new cases per month. We have a large number of children with nephrotic syndromes (85 in the last year). We also see patients with CAKUT, nephrocalcinosis, and renal cystic diseases. I have been dialysing children with AKI and I have taught residents to appropriately place catheters for haemodialysis and peritoneal dialysis. I have established management protocols and we are performing more renal biopsies. I have recently begun providing plasmapheresis to patients. We have started a regular weekly meeting with urology and radiology, and a transplant meeting with the adult nephrology team.

I would like to again thank IPNA for the opportunity to be trained and thus be more effective in treating Nigerian children with kidney disease. I am extremely grateful to Priya Gajjar, Pete Nourse, Christel Du Buisson and Mignon McCulloch for the rigorous training I received. I also made great friends with fellows from other African countries that have similar challenges in providing nephrology care. We worked together to find common solutions to the obstacles we confront. I believe that IPNA's training programs have had a major impact on the quality of pediatric nephrology care throughout the world.

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