

Interviews

Kenar D. Jhaveri spoke to EMJ about his ongoing passion for nephrology, current research and innovation within the discipline, and highlights on COVID-19-related acute kidney disease.

Featuring: Kenar D. Jhaveri



Kenar D. Jhaveri

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Q1 What inspired you to pursue a career in nephrology?

When I was training, nephrologists were regarded as the ‘detectives’ of medicine. Growing up, I really enjoyed reading and watching detective stories. Nephrology allowed for a good blend of excellent medicine and the use of my diagnostics skills to become a good detective. In addition, during medical school and residency, several key mentors made nephrology the field I would ultimately choose. Nephrology allows for a great balance of primary care and specialised medicine. It has something for everyone: acid-base for math lovers; glomerular diseases and transplant for the immunologists; critical care and cardio-nephrology for the fast-paced, procedural-based minds; dialysis and chronic kidney disease care for those who want to improve quality care; the list goes on. Nephrologists are super-internists.

Q2 What sparked your interest in glomerular diseases?

Glomerular diseases have a special place in the heart of the nephrologists. To me, glomerular diseases are an enigma and likely one of the most mysterious diseases of the human body. Podocytes are fascinating cells. I enjoy taking care of rare diseases and diseases that affect the immune system; hence, glomerular diseases are a passion of mine. In addition, there is no ‘cookbook’ for the treatment of glomerular diseases; rather, [care is] very individualised. Research in this area of nephrology is quickly furnishing and more therapeutics are on the way. Targeted therapies to treat certain glomerular diseases are likely to be just around the corner.



Q3 What was the key message of the book you co-authored, ‘Onconephrology’, which covers pathophysiology and management of kidney diseases in patients with cancer, that you were trying to deliver? And have you seen improvement in treatment over the last few years?

Onconephrology is a field of nephrology that encompasses the complex interplay of cancer and the kidney. The fields of haematology and oncology have been on an exponential rise. The rapid development of therapeutics in oncology has led to the use of novel agents to treat cancer. The kidney is an organ directly affected by cancer and the effects of cancer, but it is also an organ that can be a target of the side effects from many cancer therapeutics. The book that was released in 2013 was one of the earlier books in this field to highlight the important message to nephrologists about this novel subspeciality in nephrology. The nephrologist that deals with patients with active cancers such as myeloma, amyloidosis, lymphoma, renal cell, and others, now has to become familiar with several developing side effects of novel therapies in this field. In the last 4 years, we have seen several advances in this field. There are now many centres

of excellence around the USA, more interest in subspecialising in this area of nephrology, more original investigations looking at different topics in onconephrology, and increased awareness among haematologists and oncologists. Over the last 4 years, the American Society of Nephrology (ASN) also has an abstract submission category for Onconephrology. The field has clearly evolved in the last 9 years.

Q4 Having ran a successful teaching-oriented blog titled ‘NephronPower’, what would you say is the mission behind its creation and where can we expect to see your focus lie in the coming years?

When I was in my first year of practice in 2009, I was inspired by a blog called The Renal Fellow Network, founded by the late Nate Hellman. I felt as an educator that blog writing would promote education through a different form. Hence, I started this teaching blog to educate trainees or whoever wanted to learn via short summary posts of various topics. For me, it was my knowledge diary. Every time I learnt something new, my blog would have a post on it. ‘Teach as you learn’ is my motto. Share the knowledge! Over the last decade, the blog has evolved from simple posts to quizzes, concept maps, and other ways of knowledge sharing. My mission is simple: knowledge sharing should be easy, succinct, and done through various forms (prose and pictures). We need to reach various genres of learners and various forms of learners. The blog hopefully does that. I plan to continue evolving the blog as the times and learners change. Concept maps and quizzes are my favourite posts to do on the blog.

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Q5 You have recently been appointed as the Editor in Chief for the American Society of Nephrology (ASN) Kidney News. Could you please explain what this position entails? What has been your proudest achievement in this position?

I could not be more grateful for this honour bestowed on me by ASN. A diverse editorial board consisting of experts from all over the USA and the world really helps make the journal successful. Our goal is to highlight important nephrology issues and topics in a timely manner. We also want to use this platform to promote the field of nephrology to junior trainees and excite them about this amazing field. Since I just started the role in January 2021 what I am most proud of is the entire editorial board team: they are energetic, powerful, diverse, and dedicated.

Q6 As a nephrologist, how do you think the COVID-19 pandemic has affected the advancements in your field? What advice would you give to healthcare practitioners in the same field?

I think that nephrologists around the world were on the front line during the pandemic. Due to the fact that 10–40% of patients admitted with

COVID-19 get acute kidney injury (AKI), the care from nephrologists was crucial in the pandemic and it is still ongoing. In addition, managing COVID-19 in the dialysis unit, in transplantation, and now the vaccine response in patients with dialysis and transplants is an important part for nephrologists. The field of AKI and immunology has advanced due to the COVID-19-related AKI, in my opinion. This also allowed for the increased collaboration of nephrologists and other medical specialities to come together for the science and to learn about COVID-19-related AKI. While non-COVID-19-related research stopped for some time during the pandemic, the field of nephrology has produced some amazing new discoveries. Some examples of these are membranous nephropathy antigen developments, novel therapies for lupus nephritis and anti-neutrophil cytoplasmic autoantibody vasculitis, and ongoing novel therapies for anaemia using hypoxia-inducible factor stabilisers, to name a few. All of these developments were published during the pandemic. I think that the COVID-19 pandemic is teaching us few things: collaboration brings out the best in us and collaboration helps our patients. The pandemic has also taught us that virtual platforms can be utilised to improve our work-life balance and still allow for advancements in nephrology.



Q7
Having recently published a paper and presented on the topic of hypercalcaemia and its association with immune checkpoint inhibitors, could you give some insight into this novel topic? What do you believe are the current gaps in the literature and what topics merit greater attention?

Immune checkpoint inhibitors (ICI) are revolutionising care in patients with cancer. AKI has been reported with an incidence of 2–4% in acute interstitial nephritis. In addition to acute interstitial nephritis from ICI therapy, we are noticing additional glomerular pathology along with a series of electrolyte disorders. Hyponatraemia is common, most likely being due to syndrome of inappropriate antidiuretic hormone secretion. What is interesting, however, is that endocrine side effects of ICI lead to both hyponatraemia and hypercalcaemia. Hypercalcaemia in ICI therapy can be due to multiple mechanisms: from endocrine causes such as adrenalitis (primary or secondary) and thyroid disorders to rare sarcoidosis-like reactions and parathyroid hormone-related protein production as a result of ICI therapy. In addition, in many cases there is

an entity called pseudo-progression of tumour, which leads to hypercalcaemia. This topic really highlighted to me the unknowns of our immune system. ICI therapies are showing us what the literature has not seen before. Mechanisms of the ICI therapy that I use trigger a parathyroid hormone-related protein production, which needs further study. Why some patients develop sarcoid-like reactions and others adrenalitis is also an area that needs to be studied.

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Q8
What advice would you give to aspiring nephrologists?

Nephrology is a fun and exciting field. From dialysis, immunology, transplant, glomerular diseases, acid-base, critical care, AKI, to hypertension, nephrology offers a variety of choices for anyone who loves general internal medicine. It has a fine balance of inpatient, outpatient, and dialysis care. It allows for an excellent work-life balance. For researchers, this field is ripe for action; with an increasing number of research opportunities in glomerular diseases, dialysis modalities, and AKI, the future is really bright. What I usually tell aspiring medical students and residents is: do not go after financial security or lifestyle. Do what you are passionate about and the rest will eventually fall into place.

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