The Nephrology Elective Experience and Careers in Nephrology

The trend of declining interest in nephrology as a career is of great concern to the nephrology community. Medical education and the nephrology elective experiences that students and residents have may have important influences on career choice, and there have been proposals to introduce new elective models to help provide students and residents with a more representative experience in nephrology. A recent study found that nephrology elective experiences continue to be heavily inpatient based, despite the wide spectrum of outpatient experiences in which a practicing nephrologist engages.

For this article, ASN Kidney News Editorial Board member Joseph Martana interviewed Dr. Aditya Kadiyala, a practicing nephrologist, who was a fellow at the time he coauthored the recently published study examining the nephrology elective experience. In his paper, Dr. Kadiyala identified several reasons for declining interest in nephrology careers, and what led him to choose nephrology as a career.


Kadiyala: I think there are a few reasons for declining interest in nephrology careers. Some of the major reasons include low reimbursements for nephrologists, decreasing job opportunities, and lack of proper exposure to the field of nephrology during medical school and residencies. I chose nephrology mainly because I enjoyed my interest in electrolytes, acid-base disorders, and glomerular diseases. My prior experience doing research in the field of kidney transplantation and my elective rotations during residency reinforced my interest to pursue nephrology as a career.

Park offered a similar viewpoint on the reasons for declining interest and the factors that led him to choose nephrology as a career.

Park: From my perspective, the declining interest in nephrology is driven primarily by limited financial opportunities. Most of my colleagues and I worry about our crushing student debt and our ability to meet lifelong financial goals. The opportunity cost of 2 years of fellowship training at this point in our lives, in addition to the threat of still making less than hospitalists after graduation, is a powerful driver away from nephrology. Another aspect of the same problem is the poor availability of jobs in desirable geographic locations. My choice to pursue nephrology was based on my enjoyment of the scope of practice, building long-term relationships with patients, and willingness to move to locations that are less "physician dense" to gain better compensation. Although hospitalists still earn a better salary for hours worked in remote locations, I know that I will be able to identify my value in a high-income financial goal while practicing in a field I find intellectually stimulating.

How important are nephrology electives in influencing career choice?

Kadiyala: I think nephrology electives have a huge influence in career choice among residents. Electives give them firsthand experience in understanding the various clinical aspects of nephrology, like long-term dialysis, kidney transplantation, and chronic kidney disease (CKD) management, from more routine clinical problems like acute kidney injury and electrolyte disturbances, which they also encounter during their ward rotations. This gives a comprehensive view of nephrology and may generate further interest in nephrology.

Both Kadiyala and Park also emphasized that in addition to the intellectual stimulation of nephrology, personal contacts with faculty and fellows had an important influence on them.

Kadiyala: My interaction with the fellows and faculty on a one-to-one basis certainly helped me to learn and understand the concepts better [and this] reinforced my thoughts of pursuing a career as a nephrologist.

Park: My experiences in nephrology electives during my fourth year of medical school and residency reinforced my desire to become a nephrologist. The personalized education I received from my preceptors, including didactic and bedside teaching on nephrology topics, was intellectually stimulating and inspiring.

Were you surprised by the study's findings that most nephrology electives were primarily or exclusively inpatient based?

Kadiyala: No, not really. My nephrology elective as a resident was inpatient based. My other colleagues (during my fellowship) who trained at various programs in the United States had mainly inpatient-based electives during their residency. It is a fact that most residents do not get exposed to any outpatient nephrology experiences because there is no requirement for it during their electives, and that is what the study showed. Organizing an outpatient-based curriculum is understandably very difficult because it takes a lot of coordination between many parties and requires sacrifice from preceptors.

Park: [There are often service needs on inpatient services and] students and residents can contribute by gathering history and compiling information on a consult service.

In addition, Park said additional teaching in the outpatient setting could be viewed negatively by some, noting that "attending physicians are generally very busy in the outpatient setting, and student involvement will likely slow down patient turnover."

Why do you think it is important to include outpatient experiences in nephrology electives?

Study coauthor Kadiyala points out that much of what a nephrologist does today takes place in the outpatient setting and that inpatient-based electives do not provide a representative exposure to nephrology.

Kadiyala: Outpatient nephrology clinics along with outpatient dialysis are a big part of a nephrologist's career. Patients in those settings are also less sick. I strongly believe that management of CKD in an outpatient is a major part of nephrology that residents should get exposed to. Taking all these into consideration, I believe the residents get a completely different picture about nephrology when outpatient experiences are included in their electives."
Do you think that nephrology electives are a good opportunity to begin mentoring experiences for students and residents?

Kadiyala: Elective experiences give a very good opportunity for residents and students to interact with faculty and fellows on a one-to-one basis. Attending didactic lectures, biopsy conferences, and journal clubs during the electives would certainly enhance interest among the trainees. Electives are a good time for residents to pursue any research ideas they have thought about and also to find the right mentors to guide them.

Park: I believe every interaction between an attending physician and a student or resident or fellow is an opportunity for mentorship. Electives may have an advantage over other rotations because students who are already interested in the field have been self-identified, and more time is available for personalized mentorship.

Aside from introducing more outpatient experiences and promoting mentoring, what changes in the nephrology elective experience do you think would be most likely to increase interest in the field by students and residents?

Kadiyala: The other things that would likely increase interest would be 1) rotating in subspecialties in nephrology, like kidney transplantation and interventional nephrology; 2) exposure to procedures in nephrology like dialysis catheter insertions and kidney biopsies; and 3) involvement in didactics and conferences during their electives.

Park: When nephrology fellows voluntarily take jobs as hospitalists after graduation, demoralization occurs in a top-down fashion, and a very obvious message is sent to residents and medical students. Positive changes in the reimbursement model or work-life balance will stimulate greater interest in nephrology.

References

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