

## Burnout in Nephrology Implications on Recruitment and the Workforce

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Nephrology training is at a crossroads. Although nephrology programs remain high quality with skilled, dedicated faculty and research mentors, resident interest and entry into the field have declined. The reasons for this are multifactorial (1), but there is one issue that has received little attention: physician burnout.

Burnout is a work-related syndrome characterized by depersonalization, emotional exhaustion, and a low sense of personal accomplishment. Burnout is highly prevalent in residents and practicing physicians (2), and unfortunately, it is increasing over time. A recent survey observed an increase in burnout symptoms from 40% to over 50% in internal medicine subspecialists from 2011 to 2014 (3). Also, in a recent *Medscape Lifestyle Report*, 47% of nephrologists reported burnout symptoms, which ranked the fifth most severe compared to 24 other specialties (4). Many factors contribute to physician burnout: work hours, night/weekend calls, excessive bureaucratic tasks, and moral distress (4,5). Burnout is independently associated with job dissatisfaction, faculty/staff turnover, and reduced productivity. Thus, it has strong implications on the nephrology workforce and training environment.

In terms of nephrology fellowship training, surveys on satisfaction and work-life balance give us a glimpse into the variables that contribute to burnout in our fellows. For example, Shah *et al.* (6) observed that 44% of United States adult nephrology fellows were “somewhat, slightly, or not at all satisfied” with their career choice due to poor job opportunities, long work hours, poor teaching/mentoring, and an overall poor fellowship experience. In a more recent survey commissioned by the American Society of Nephrology, 16.9% of fellows in the second year and beyond reported a work-life balance that is either “poor or very poor” (7). Fellows who would not recommend nephrology to others cited the heavy workload, low compensation, and difficult schedule as important factors among others. When looking for jobs, they ranked as “important or very important” the frequency of weekend duties/overnight calls and length of each workday (7). Although interest and strong mentors have a positive influence on the decision to go into nephrology (6), it is clear that many have concerns about the workload of such a career. Unfortunately, many fellows end up regretting their career choice, and it seems that barriers to work-life integration may play an important role.

Nephrology fellowship training is known for being arduous, even among the internal medicine subspecialties. Because we manage critically ill patients, there are many times when a nephrologist is needed urgently to help a patient. However, some overnight consults are not urgent and could be appropriately seen during the daytime. In academic hospitals, local culture and house staff comfortability with kidney disease might contribute to extra overnight calls for fellows. Because of these demands, nephrologists are at risk for exhaustion. Also, in the absence of regular feedback or recognition from faculty and leadership, it is possible for high-achieving fellows to develop a low sense of personal accomplishment. Also, nephrology fellows are on the front line of clinical encounters that can cause moral distress: providing futile care for the critically ill, having difficult patient interactions (8), and treating undocumented patients with emergent-only dialysis. Therefore, our fellows are at risk for burnout during fellowship training.

We care about burnout in nephrology, not only because we value provider health and wellness but also, because burnout is contagious. It is no surprise that nephrology fellows who are either satisfied or unsatisfied with their career choice cite reasons directly related to the learning environment (6). In an Australian survey, trainees who were turned off from nephrology cite distress from negative patient interactions and feeling hopeless when caring for patients on dialysis (8). They also had concerns about workload: an overwhelming patient census, excessive on-call requirements, and attending burnout all played a role in turning trainees away from nephrology (8). Likewise, trainees who develop positive attitudes cite a strong role model, excellent teaching, and positive aspects of nephrology (6,8). Although many factors influence resident career decisions, the quality of the environment, including supervising faculty/fellow attitudes and behaviors, plays a central role in shaping surrounding attitudes. When faculty and fellows are burned out, negative attitudes can infect the learners and color a resident’s perception of nephrology (8,9). Alternatively, a learner can develop negative attitudes *de novo*, and it is up to the faculty member to effectively communicate and show the positive aspects of nephrology, perhaps sharing his/her own motivations while curating a diverse clinical experience. When

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faculty and fellows are suffering from burnout, the positive learning environment is at risk, and they are less effective at communicating their mission. In fact, while burned out, they themselves may be questioning their career choice.

If burnout is highly prevalent, increasing with time, and contributing to a toxic learning environment, how can we remedy the problem? As it is true for other complex, multifactorial problems, there is no clear, easy solution. However, it seems that a combination of both individual-focused and organizational interventions can reduce physician burnout. A recent systematic review and meta-analysis identified a number of interventions that have been shown to reduce burnout symptoms in physicians (10). For example, stress management and self-care training effectively reduces burnout. Specifically, mindfulness-based approaches to stress management have been associated with significant reductions in burnout scores (10). A number of these stress management programs are available locally or through smartphone applications. Also, facilitated small group sessions are effective at reducing physician burnout, because they give providers an opportunity to share and reflect on difficult patient encounters (10). In a fellowship program, this would give fellows a wonderful opportunity to debrief morally distressing events in a supportive environment. These sessions could improve group cohesion, reduce feelings of isolation, and alleviate burnout symptoms. In addition, communication skills training, usually in conjunction with other strategies, has been shown to reduce burnout (10). Because difficult patient interactions can promote negative attitudes, advanced communication skills training for faculty and fellows could be a very effective tool for combating burnout. Enhanced communication skills would have the added benefit of improving patient/physician satisfaction, while reducing the stress and anxiety that come from difficult encounters. Perhaps nephrologists who model patient-centered, nonjudgmental communication can show learners how one can enjoy a career embracing difficult scenarios rather than avoiding them (8).

Organizational and structural interventions are also needed to reduce burnout. Duty hour limitation seems to be effective at reducing burnout (10), and although monthly limits are in place for trainees, faculty and practitioners have no such limits. Thus, nephrologists who are consistently working long hours, burdened by excessive bureaucratic tasks, and delaying/forgoing self-care habits are at risk. Practice delivery changes will be needed to reduce physician workload, and some are already hiring advanced practice providers to help with inpatient service workloads. Also, in the era of electronic medical records, we can build logic into consult orders to minimize overnight pages. For example, consults frequently occur overnight for routine maintenance dialysis or nonurgent medical issues. An ordering system that allows the user to choose the priority (*e.g.*, urgent consult versus routine consult: can be seen tomorrow) could automate when the notification actually goes to the physician. This system would streamline workflows and reduce interruptions in sleep. Because frequent call responsibilities and inpatient work can lead to exhaustion, a good balance between inpatient rotations and outpatient rotations is one way to reduce exhaustion and burnout. In an

informal survey of United States nephrology training program directors ( $n=36$ ; 93% university based), we observed wide variability in how each program structures outpatient experiences. Some programs have outpatient experiences that only run concurrently with inpatient rotations, whereas others provide a “pure” outpatient block. Interestingly, 44% of the respondents reported having recently increased the number of outpatient experiences aside from the weekly continuity clinic. Strategic placement of dedicated outpatient blocks in the first year can do two key things: (1) provide more time to experience the continuity of care, allowing fellows to develop those close patient relationships that remind them why they chose medicine in the first place, and (2) provide time to recover from fatigue, all while addressing important outpatient-specific learning goals. Training programs that are biased toward inpatient rotations should review rotation structure and consider increasing the balance between outpatient and inpatient experiences.

As we worry about how to recruit residents into the field of nephrology, we need to consider how each resident is highly motivated to make the best career decision, not only for personal interests but also, for their health and family responsibilities. We should consider constructing the practice of nephrology in such a way so that it is a healthy decision to choose nephrology. At every program and hospital, the residents are paying close attention to the physicians in the various specialties. They talk to each other about the relative call schedules, service volumes, personalities, and nature of the work. This is where, for better or worse, perceptions of nephrology are cultivated (8,9). If we let overwork, emotional exhaustion, and depersonalization creep into our specialty, we are putting ourselves and the future of nephrology at risk. A concerted effort to address burnout across training programs, private groups, and academic divisions can reduce symptoms, foster a positive learning environment, and boost recruitment. Our efforts would not go unnoticed. We would truly stand out from the crowd for all of the right reasons.

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None.

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See related articles, “Nephrology at a Crossroads,” “Addressing Physician Burnout: Nephrologists, How Safe Are We?,” and “Transforming Nephrology,” on pages 324, 325–327, and 331–334, respectively.