Barriers to the professional advancement of women in nephrology

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In 1849 a letter to the NEJM, following the award of a medical degree to Miss Blackwell, stated; "it is much to be regretted that she has been induced to depart from the appropriate sphere of her own sex, and led to aspire to honours and duties , which by the order of nature and the common consent of the world devolve alone upon men"[1]. The Editorial replied: "No law prevents woman from occupying and cultivating any of the three great fields of medicine.... but there are obstacles nevertheless, much more subtle and powerful than law"[2]. Nearly 200 years later, despite huge strides in gender equality and equity, many of the barriers to women in medicine and more specifically in nephrology, remain similarly powerful.

Women now make up 80% of the healthcare workforce in the United States and yet only 3% of healthcare CEOs, 6% of department chairs, and 3% of chief medical officers are women[3]. In the developed world nearly 40% of Nephrologists and nephrology trainees are female with higher proportions in the younger age brackets [4]. To qualify as a specialist in Nephrology takes a minimum of five years following graduation. This means that training years coincide with peak child-bearing years, and despite changes in societal attitudes

women remain the primary carer in two-thirds of families. 'Deferred parenthood' has been described in numerous studies; women restricting their personal aspirations of having a family to benefit their medical careers [5].

Motherhood and nephrology

Having a baby during training is fraught with logistic challenges. Training may involve movement between hospitals, regions and sometimes even countries. This can mean separation from partner and children, loss of family support, or up-rooting the family unit. Interruptions in contracts between hospital jurisdictions can, lead to inadequate service-time accrued to qualify for paid maternity leave and the burden of ensuring financial reimbursement can be challenging. Globally there are big discrepancies in access to maternity leave and remuneration. In the USA the Family and Medical Leave act allows for 12 weeks of maternity leave, however this is unpaid. Family leave policies remain at the discretion of practice leadership, which may encourage shorter leave and lead women who curtail leave to be perceived as better workers. Neither the Accreditation Council for Graduate Medical Education nor the American Board of Internal Medicine has transparent policies specifically addressing maternity leave.

Returning to work after having a child raises further barriers. Training in a part-time capacity in some countries is not supported by certifying boards. Elsewhere, although theoretically possible, flexible training is not facilitated and supporting infrastructure is lacking. Nephrology working hours are often incompatible with child-care centres and after-hours

work patterns presume a partner or paid carer is available for childcare. The practice of holding key clinical governance or interdisciplinary meetings outside of normal working hours leads to structural exclusion of primary caregivers. Arranging work schedules to accommodate child care responsibilities has been shown to be a significant cause of stress and to negatively impact career advancement[6].

There are also under-appreciated pressures around maternity leave. When a worker on maternity leave goes un-replaced, there can be guilt about leaving a department understaffed, or hostility from already stretched co-workers that they must shoulder the role of the absent. There is also justifiable fear that taking any leave during training could be detrimental to future job prospect. Time out of the workforce can impact confidence and familiarity and there is little support in place for parents returning to work. Extending training or working part-time can impact financial and locational security. Balance is difficult; women can feel that they are failing as a mother. Female physicians have higher divorce rates than male physicians, more notable in women who work the longest hours [9].

Barriers to advancement and continuing professional development

Advancement within a medical career relies on continuing professional development, networking and academic achievement. There may be financial disincentive to undertaking higher studies and this may impact earning capacity. A recent evaluation of NIH funding found that women received smaller grants than men, even when controlling for research potential[10]. Nor is publishing research a level playing field; journal papers are more often

published by men, up to 80% of peer-reviewers are male, and only a third of journal articles have a woman as primary author [11].

Attendance at conferences is important for networking, promotion of research and professional advancement. Many of the significant nephrology conferences are scheduled over weekends and school holidays which again can lead to structural exclusion. Lack of childcare facilities, exclusion of children from conference venues and the prohibitive additional cost of childcare are major barriers to attendance.

The gender pay gap is stark, and is not accounted for by number of hours worked; 2018 UK figures suggest that 58% of part-time medical practitioner jobs are held by women, but they continue to be paid 18.4% less than their male counterparts[4 12]. The 2017 Early Career Nephrologists survey (self-reported) in the USA echoed this with females earning a mean of $31000 per annum (16%) less than their male colleagues[4].

Women as leaders in Nephrology

There is a pervasive bias in medicine with both men and women implicitly associating science with men. Since inception in 1966 there have been three female compared to 49 male presidents of the ASN; of the ISN only 2 female compared to 24 male presidents. Professorships held by females are increasing but still only represent a quarter of academic nephrologists. Of five leading Nephrology journals, two now have female Editors-in-Chief, but only about 20% of deputy or associate editors are female. Women are less likely to self-promote, receive fewer major awards, and when recognised receive less prestigious

honours. In the last 10 years only 5 of the 30 (17%) highest honours have been awarded to women by the ISN, and the ASN has awarded only 8 out of 53 (15%) awards to women.

Where to from here?

Data for current experience of women trainees and physicians in nephrology is scant. Research should be prioritised to enable us to implement and reassess change. In the interim, The American College of Physicians recently published a position paper: Achieving Gender Equity in Physician Compensation and Career Advancement[14]. This paper lays out many practical and important objectives which we, in Nephrology should aim to expand on and incorporate into our collective culture.

Family friendly policies

Nephrology societies and training bodies should lead the way in ensuring that paid parental leave and flexible training are prioritised, endorsed and facilitated. Nephrology training schemes need to make financial and personnel investments to facilitate and actively encourage flexible work, while shifting the burden of administration from the parent to the institution. Reintegration into the work force following maternity leave should be facilitated including provision of childcare services, funded refresher courses, breast feeding support at work and support to combat imposter syndrome. Structural inequalities can be addressed by ensuring that key clinical, educational and professional activities are held during working hours or that childcare provision is addressed in the timetabling.

Promoting gender equity

Change is afoot and equity committees are launching (e.g. the ASN, the UK Renal Association and the ANZSN), however they need to ensure that they translate to real change. Formal training in unconscious bias, particularly to members of promotion, funding and assessment committees can help address gender-based prejudice. Nephrology professional bodies and training colleges should ensure diversity on all boards and committees and if necessary quotas should be established. Financial inequity is a priority and transparent pay progression policy should be implemented. Financial disincentives should be removed. Access to family-friendly conferences should be universal; including the provision of childcare, lifting admission restrictions, and providing stipends to encourage parent participants. An environmentally friendly solution may be to stream international conferences to national centres with agreement that travel and attendance could be eligible for the same allowances and grants whilst requiring less time away from the family.

Championing women as leaders in nephrology

Mentoring can contribute to the engagement, motivation, well-being, career mobility and satisfaction, and leadership capacity of both mentees and mentors. Formalised mentoring program matching mentor/mentee pairs based on education, training and subspecialty interests bring positive results. Sponsorship programs in the corporate world have facilitated the movement of women into leadership positions. Sponsors differ from mentors in that they advocate for, and advance the positions of, promising candidates.

Systematization can ensure that achievements are equitably recognized and prizes awarded accordingly [3].

Everyone benefits when there is gender equity in the work place and it is the responsibility of both men and women to achieve this. To ensure that nephrology remains an attractive option for all future physicians we need to lead the way in removing barriers and prioritising gender equity, ensuring a more flexible, efficient and effective work force.

Figures

Box 1. Summary of recommendations

1. Prioritise research into the current barriers and facilitators for women in nephrology.
2. Institute family friendly policies addressing paid parental leave, flexible training and practice, breast feeding support, child care services, carers leave and structural exclusion.
3. Address gender-based discrimination by implementing unconscious bias training, transparent pay practices, board and panel quotas.
4. Promote women as leaders by implementing formal mentor programs, sponsorship, systemisation of achievement and flexible leadership training and roles.
5. Remove financial and logistical disincentives for women to participate in academia, education, continuing medical education and self- and peer-promotion.

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