Nephrology in developing countries: the ISN’s story

What could you do to support medical care in developing countries? This question should be compelling to many physicians in developed regions of the world, particularly those working in nephrology—a subspecialty often associated with expensive and technologically advanced therapies. In many low-income and middle-income countries (LMICs), long-term dialysis or transplantation for end-stage kidney disease are not available, but other ways to reduce the burden of kidney disease do exist—eg, management of reversible acute kidney injury by early detection, and the use of peritoneal dialysis, which is feasible, effective, and affordable. Another example is to address non-communicable diseases—for which chronic kidney disease is a powerful risk multiplier—by use of low-cost community-based detection and treatment strategies for chronic kidney disease that are effective and affordable in most settings.

However, the most important thing that can be done is to build capacity for sustainable self-sufficiency in nephrology. Since the 1980s, the International Society of Nephrology (ISN) has used its resources for education and training and, in doing so, advanced nephrology in LMICs worldwide through a portfolio of five outreach programmes. These programmes, delivered at very low cost, are a model for what can be achieved by volunteers in a specialist society or other group committed to helping patients and colleagues in developing countries.

In the past 25 years, the ISN’s fellowship programme has sponsored more than 600 nephrology trainees from more than 80 LMICs, who are required to sign an agreement stipulating that they will return to their home country after training; 35% are now training within their own region of the world. Survey data show that the trainees go on to become leaders in their own hospitals and universities, showing that ISN’s strategy of selecting individuals with the greatest potential is working.

The ISN also helps to establish sister renal centres in LMICs, which develop nephrological expertise through relationships with established centres in developed countries, with notable successes. A typical sister centre graduates after 6–8 years and in turn supports another emerging centre in its own country or region. This approach is a two-way process, with staff in the supporting centre often having to learn as much as those in the emerging centre.

Furthermore, there is the option for experienced nephrologists to join our educational ambassador scheme and to visit a nephrology centre in an LMIC for several weeks to help to establish new programmes that will benefit patient care. ISN has more than 100 volunteers covering every aspect of clinical nephrology who are available to travel and teach anywhere in developing regions of the world.

Additionally, the clinical research and prevention programme builds research capacity in LMICs by providing seed funding for small clinical research projects, and by assigning research mentors. It supports chronic kidney disease surveillance programmes, helping LMICs to generate their own epidemiological data—crucial for influencing health policy. These data are generated independently, and also in partnership with WHO and the Global Burden of Diseases project.

Figure 1: International Society of Nephrology programmes in Africa, funded in 2012
CME=continuing medical education. ISN=International Society of Nephrology. SRC=sister renal centre.
Food allergy affects roughly 15 million Americans and 17 million Europeans, most being young children.1,2 At present, there is no known treatment or cure. However, oral immunotherapy (OIT) is a promising investigational therapy which aims to produce allergen desensitisation through graduated dose exposure to an allergen (eg, temporary tolerance from continuing controlled exposure to an allergen, which wanes if ongoing exposure is withdrawn). Over time, a lasting tolerance to incidental allergen ingestion might remove the need for continued ongoing exposure.3

In The Lancet, Katherine Anagnostou and colleagues report the results of the STOP II trial,4 a two-step, phase 2, unmasked, randomised controlled crossover trial of peanut OIT in 99 children aged 7–16 years, inclusive of all severities of peanut allergy. In the first phase, participants were randomly assigned to receive either 26 weeks of OIT to 800 mg of peanut protein, or peanut avoidance (the standard of care). Both groups then underwent a double-blind, placebo-controlled, peanut challenge, and in a second phase the control group was offered the 26 week OIT protocol and challenge. Among OIT participants, 91% (95% CI 79–98) were desensitised to 800 mg, the equivalent of five peanuts. In terms of the trial’s primary outcome, 24 of 39 OIT participants were desensitised to 1400 mg of peanut protein (the