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New Nephrology Departments: Challenges of the Future

Think big but start small

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ABSTRACT

Portugal has the highest incident of chronic kidney disease (CKD) in Europe and the incidence and prevalence of advanced CKD requiring renal replacement therapy are higher than in other occidental European countries. The development of new nephrology departments, even if these have no dialysis facilities, is crucial to curb the growth of this pathology which is already considered a public health problem. Despite the lack of resources, young nephrologists, who are a reflection of our excellent postgraduate education, are perfectly capable of planning, creating and leading these important new departments.

Key-words: chronic kidney disease; nephrology departments, primary care, young nephrologists.

Chronic Kidney Disease (CKD) is increasing in prevalence, especially among elder people.

CKD is the cause of noncommunicable disease mortality that has increased most since 1990, with great impact on patients' morbidity and mortality, as well as having an enormous economic impact[1].

Recognition of the disease by the population is still very low, and consequently its detection is late[2]. Costs related to CKD continue to increase, especially for pre-dialysis patients[2]. This situation is unlikely to change in the coming years as the main risk factors for the development of CKD are difficult to control and/or reverse.

Our National Health Service (SNS) faces challenges triggered primarily by demographic changes, changes in diseases patterns, technological innovation and geographical mobility[3].

The high prevalence of CKD in an aging population, with multiple comorbidities and mobility difficulties implies changes in healthcare policy, with strategies to prevent and control disease development, such as using well-prepared human resources.

Thus, the development of new nephrology departments that can grow despite the lack of dialysis facilities will optimize strategies in patient management and improve the prevention and treatment of CKD.

It will allow for a faster and earlier assessment by a nephrologist and prevent patients' displacement to a more distant hospital with the costs inherent in this, namely personal, family and/or caregivers and healthcare transport. Additionally, it allows the reduction of the waiting list.

These new departments will work closely with primary care, optimizing the prevention and treatment of CKD.

As an improvement in the care of patients with CKD, new nephrology departments are crucial in curbing the growth of this pathology which is already considered a public health problem.

Further, having different departments dedicated to different stages of the disease creates a greater confidence in managing CKD in the community.

The main objective is to improve a care network focused on better accessibility and care for patients with kidney disease. Of course, this is only possible through maintaining functional interdependence with the existing nephrology departments.

HUMAN RESOURCES

The budget allocated for nephrology, due to the modest economic resources of our country, is being largely channeled into treating an ageing population and toward the overall treatment of chronic terminal renal disease.

"Nephrology is a medical specialty dedicated to the prevention, study and treatment of kidney disease at all stages of its evolution."[3]

Young nephrologists must think about the future of our profession. It is worthwhile taking time to reflect on how we are prepared to meet the future in an incessantly changing SNS.

Our young nephrologists are a reflection of our postgraduate education[4].

It´s unthinkable that we can finish the residency period without having been fully involved in care of acute kidney injury, chronic kidney disease, dialysis and renal transplant patients[4].

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Out of necessity, young nephrologists' training might focus on other areas of clinical influence: intensive care units, endovascular interventional therapies and the use of Doppler ultrasound for vascular access care. They are also facing a new challenge after finishing their residence: finding a place to work[4].

This all means they must be able to purse important work in important areas of clinical nephrology.

In the course of this twenty-first century, in a country with low economic status, with institutions outside major urban centers facing strong economic constraints, where clinical nephrology will be increasingly dominated by the treatment of CKD of a growing number of elderly patients, our primary responsibility is to restore nephrology to its rightful place within the framework of the other medical specialties[5].

Nephrology's role should be primarily focused on preventing the progression of kidney disease and not only associated with replacement therapy when failure is already irreversible.

There is, in this respect, a very important task to be performed, that of creating a culture of nephrology in smaller, district hospitals with new nephrology departments.

Nephrology must assert itself categorically in terms of education about and the prevention and treatment of kidney disease[5].

To sum up, in all nephrology departments, the treatment of kidney disease in all its stages, even after the definitive failure of renal function, should be the responsibility of the nephrologist.

For all these reasons, nephrologists will need to create and develop an increasing number of new autonomous departments in smaller district hospitals.

STRATEGIC DEPARTMENT PLANNING

Throughout the last decade, strategic planning in health care has been used less frequently, with poor outcomes[6].

Strategic thinking requires making conscious choices on how to use limited resources to achieve a goal in response to a changing environment. Therefore, strategic thinking includes making decisions on what we will and will not do, where we should focus our efforts, and what our overall priorities should be[6].

Therefore, the best way to grow is via developing goals and objectives that are specific, measurable, achievable, relevant and time oriented.

The best strategy is to work through partnerships; greater independence is not a goal but rather a strategy to reach the defined goals.

SHARING MY EXPERIENCE

Since May 2014 I have been working as a nephrologist at Centro Hospitalar do Tâmega e Sousa (CHTS), EPE – Penafiel.

CHTS was created in 2007 from the merger of Penafiel Hospital Unit and Amarante Hospital Unit, in the Vale do Sousa region, a transition zone between the metropolitan area of Porto and the northern inland region.

Its catchment area covers a population of about 550,000 inhabitants, and it is the primary referral hospital of 12 municipalities in 4 districts.

CHTS currently has 618 inpatient beds and the emergency service is one of the largest in the northern region with an average of 500-550 daily admissions.

Since its inception, there has been no nephrologist on the CHTS clinical staff.

I started work with the aim of creating a nephrology department that covered the different areas of the specialty, thus addressing the lack of nephrological support to hospitalized patients and improving the insufficient nephrological support provided to the population within the CHTS catchment area.

Thus on 8 May 2014 I founded the CHTS Nephrology Unit, of which I am currently coordinator.

It is part of the medical department, but operated and organized independently of any other hospital service.

I am asked many times by many of our peers: "So what does a nephrologist do in a hospital without dialysis?"

He works hard for the gradual development of an as yet nonexistent in-hospital nephrological culture that may never come into existence; works hard to respond to ever-increasing care needs, that in a hospital with such a large catchment area will allow the progressive increase of human resources in the field of nephrology over time; works hard to structurally develop the various nephrological areas that are needed; works hard to promote a better interplay with primary care, increasing disease prevention and increasing the adequate and timely approach and optimization of resources management.

In short, the fundamental aim should be to restore nephrology to its rightful place within the framework of other medical specialties. We must categorically assert nephrology's role in the prevention, study and treatment of kidney disease at all stages of its evolution.

The health service should invest in nephrology units as part of improving health care.

There is a lot to do, even without dialysis…

Therefore, from the beginning I started care activities in the following areas: diabetic nephrology consultation, general nephrology consultation, therapeutic clarification consultation, day hospital sessions, internal consultation at all services and the performance of renal biopsies.

At the same time, we developed a screening program called Proximity Nephrology for children aged 6-18, and we provide training in primary care and in various hospital services.

There are currently four young nephrologists in the CHTS Nephrology Unit: Carlos Botelho M.D, Rui Abreu M.D, Patricia Neto M.D and newcomer Catarina Meng M.D.

Increased human resources have allowed us to increase clinical activity, starting new projects such as conservative therapy consultation, polycystic kidney disease consultation, placement of tunneled dialysis catheters and interventional nephrology- endovascular procedures.

Our numbers for 2018: 1485 first consultations, 3124 inpatient support consultations and 29 kidney biopsies; 58 patient electively initiated hemodialysis and only 5 with tunneled catheter; all others have functional definitive vascular access built in the CHTS.

Renal replacement therapies are not yet available in our hospital; patients with urgent need for dialysis are transferred to the referral hospital as outlined in the nephrological referral network.

During 2018 we transferred 201 patients who needed urgent dialysis.

WHAT DOES THE FUTURE HOLD?

Considering that organization, management and prescription of renal replacement therapies should be exclusively performed by nephrologists, the future in the short term will be the hiring of more human resources and the construction of infrastructures that allow the sustainable development of new functional areas.

All this work and future strategic planning is only possible because I have the privilege of working with three young, creative and energetic new specialists who despite facing a new reality – working without dialysis – are endowed with tremendous resilience and a forward-looking approach to nephrology.

In conclusion, empowering new nephrology departments is crucial and young nephrologists are perfectly capable of leading them.

HOW BEST TO DO IT?

In my opinion, taking into account the pillars of innovation: have a mission that matters; think big but start small; strive for continual innovation, not instant perfection; look for ideas everywhere; share everything; spark with imagination; fuel with data; be a platform and never fail to fail[7].

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