EDITORIAL

KIDNEY TRANSPLANTATION IN ETHIOPIA: THE DAWN OF A NEW ERA IN RENAL CARE

Yewondwossen Tadesse, MD*,1, Sileshi Lulseged, M.D, MMed2

Kidney disease is a global public health problem that affects more than 750 million people globally. (1). Both Acute Kidney Injury (AKI) and Chronic Kidney Disease (CKD) impose significant burden on health care systems but receive less attention than other noncommunicable diseases on the global policy agenda (2).

Chronic kidney disease (CKD) is defined as abnormalities of kidney structure or function, present for > 3 months, with implications for health (2). Glomerular filtration rate (GFR) <60 ml/min/1.73m² is the cutoff point used to define decreased GFR that represents decreased kidney function. The global incidence and prevalence of CKD have been observed to have increased by 87% and 89%, respectively from 1990 to 2016(3). Although accurate data on the prevalence of CKD in Africa are lacking, a recent meta-analysis of 98 studies involving 98,432 individuals showed that the overall prevalence of CKD was 15.8% (95% CI 12.1–19.9) for CKD stages 1–5 and 4.6% (3.3–6.1) for CKD stages 3–5 in the general population.(4)

There are no data on the incidence and prevalence of CKD in Ethiopia but there is evidence to show that risk factors for CKD like diabetes and hypertension are quite prevalent. In a national survey for noncommunicable diseases(NCDs) using the World Health Organization (WHO) STEPS in which a total of 10,260 people aged 15-49 years participated, the prevalence of hypertension was 15.8% while the prevalence of diabetes was 3.2% (5). It will, hence, be logical to infer that CKD may be as common in Ethiopia as elsewhere in Africa.

While many patients with CKD die from cardiovascular disease before they reach end stage kidney disease (ESKD) for those who reach end stage kidney disease, transplantation offers the best prospects for improved survival and quality of life. The first successful kidney transplantation was done at the Brigham Hospital in Boston, USA in 1954 by a team led by Joseph Murray (6). In the six decades since the first successful kidney transplant was done, transplant activities have increased and spread across the globe. In 2017, the last year from which data are available from the Global Observatory of Donation and Transplantation a total of 90,306 kidney transplants were done in 81 countries (7). Ethiopia’s kidney transplant program did its first transplant in September 2015 allowing Ethiopia to join the list of countries with solid organ transplantation programs (8).

In view of the presumed rise in the prevalence of CKD and ESKD, the establishment of a kidney transplant program in Ethiopia by the Federal Ministry of Health is quite a laudable achievement. All those involved in establishing the program and seeing it through, including the Federal Ministry of Health, the management and transplant team at the Saint Paul Millennium Medical College (SPMMC) and the University of Michigan deserve to be congratulated. The success of the program, in terms of clinical outcome, is on a par with outcomes in the developed world (8).

In this special issue of the Ethiopian Medical Journal (EMJ), several papers related to the new transplant program are presented. The topics covered range from history of the development of renal replacement therapy in Ethiopia to the outcome of the first 52 patients that had kidney transplant in the SPMMC. Surgical complications among the transplanted patients, follow up results of the donors and the surgeries done on animals in preparation for the program are among the topics addressed. Although the numbers are quite small and the period of follow-up rather short, the EMJ believes that recognizing this milestone in the development of advanced medical care in Ethiopia would encourage individual professionals and health care institutions to drive towards higher goals.

It is important to emphasize at this point that renal care in Ethiopia must be planned beyond the care of the few who reach end stage kidney disease. Renal care must encompass the promotion of kidney health, the detection and prevention of risk factors for kidney disease, slowing the progression of kidney disease as well as the provision of

1Department of Internal Medicine, College of Health Sciences, Addis Ababa University.
2Department of Pediatrics and Child Health, College of Health Sciences, Addis Ababa University.
*Corresponding author: yewondt@yahoo.com
renal replacement therapy for patients with acute kidney injury (AKI) and end-stage kidney disease (ESKD). We would, therefore, like to make an appeal to all stakeholders to work on a Comprehensive National Policy for Renal Care as a matter of urgency.

Once a policy framework is agreed on, concrete strategies and plans for renal care at all levels of the health care system can be drawn and implemented. Renal care must be part of Universal Health Coverage (UHC), the ambitious guiding policy of the global community led by the World Health Organization (WHO) (9). UHC is aimed at improving the health of the global population and at stopping hundreds of millions of people from falling into poverty as a result of health care costs. Health care costs are quite high in renal care and the increasing burden of kidney disease has been raised as one of the most significant barriers to the achievement of UHC (11).

Improving focus on early intervention through the identification of risk factors and treatment, innovations in later stage care by way of developing low cost dialysis technology and removing barriers to transplantation are some of the proposed means to achieve UHC in renal care in low- and middle-income countries (10). In this regard the need for generating local data on the burden of kidney diseases to improve the evidence base to guide policy cannot be overemphasized. The EMJ is pleased to serve as the scientific forum for sharing the results of new program as done through the articles in this Special Issue as well as epidemiological evidence generated through penetrating and comprehensive research in the future.

Renal registries provide critical information to support the planning, delivery and evaluation of renal services particularly dialysis and transplantation. Most African countries do not have renal registries but recently an initiative to establish a continental Africa Renal Registry has taken off the ground (11). If renal care in Ethiopia is to grow to meet the public needs, it is imperative to establish a renal registry and it is incumbent upon the Federal Ministry of Health to take the necessary steps towards this goal with the advice and support of renal care professionals.

REFERENCES