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GLOBAL TREND AND CHALLENGES IN ESKD CARE

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There is an increasing global burden of end-stage kidney failure (ESKF) causing a rapid growth in the dialysis population. The Global Burden of Disease Study in 2017 estimated that 1.2 million people died from chronic kidney disease (CKD), with the global all-age mortality rate from CKD rising 41.5% between 1990 and 2017 [1]. Moreover, most of the CKD burden was concentrated in the three lowest quintiles of socio-demographic index, where, particularly in Oceania, sub-Saharan Africa and Latin America, the affliction of CKD was much higher than expected for the level of development [1]. Diabetic kidney disease is a major contributing cause of ESKF, accounting for almost a third of disability-adjusted life-years. Indeed, this trend appears to parallel the prevalence of diabetes worldwide with the International Diabetes Federation estimating an increase of 48% from 425 million in 2017 to 629 million people in 2045 who are afflicted by the condition globally [2].

However, worldwide, a substantial number of people still lack access to kidney replacement therapy, and millions of people die of kidney failure each year, often without supportive care. An estimate-model suggests that in 2010, at least 2.284 million people might have died prematurely because kidney replacement therapy could not be accessed. This treatment gap was noted to be largest in low-income countries, particularly in Asia and Africa [3]. A study from sub-Saharan found that 84% of adults with incident ESKF discontinued dialysis despite medical indications, mainly because of exhaustion of financial resources, with only 1% continuing dialysis treatment for at least 12 months [4].

At the heart of the United Nations Sustainable Development Goal #3 of ensuring healthy lives and promoting well-being for all at all ages is universal health coverage and universal access to health. However, this aspirational goal for people suffering from ESKF is often met with many deterring factors, especially in low resource settings. The costs of dialysis care are high and will likely continue to rise because of increased life expectancy and improved therapies for causes of kidney failure such as diabetes and cardiovascular disease. Patients on dialysis continue to bear a high burden of disease, shortened life expectancy and report a high symptom burden and a low health-related quality of life.

Initiatives to transform dialysis outcomes for patients require both top-down efforts (that is, efforts that promote incentives based on system level policy, regulations, macroeconomics and organizational changes) and bottom-up efforts (that is, patient-led and patient-centred advocacy efforts as well as efforts led by individual teams of innovators). Patients, payors, regulators and health-care systems increasingly demand improved value in dialysis care, which can only come about through true patient-centred innovation that supports high-quality, high-value care.

Home dialysis modalities, especially peritoneal dialysis, are associated with increased patient autonomy and treatment satisfaction, and in most situations are less costly than in-centre hemodialysis [5-8], making them attractive solutions to the high ESKF disease burden and poor financial sustainability to dialysis treatment in low-income countries. Moreover, the COVID-19 pandemic has highlighted the benefits of home-based dialysis treatment, in terms of infection control, easing the strain on healthcare manpower and mitigating movement restrictions. Yet, despite mounting evidence regarding the benefits of home dialysis, its use worldwide remains low. The availability and use of home-based dialysis therapies remain variable, shaped by a complex

interplay among national healthcare policies, systems for dialysis delivery, financial considerations and culture [9].

Against that backdrop, KDIGO convened a controversies conference on home dialysis in 2021, focusing on how modality choice and distribution are determined, and strategies to expand home-dialysis use [9]. Participants recognized that expanding the use of home dialysis within a given health system requires alignment of policy, fiscal resources, organizational structure, provider incentives and accountability. Moreover, choice among available modalities is preference-sensitive, with consideration for quality of life, life goals, clinical characteristics, family or care-partner support, and living environment. There was strong agreement that everyone who faces dialysis should have access to home therapy. Facilitating universal access to home dialysis and expanding utilization requires alignment of policy considerations and resources at the dialysis-centre level, with clear leadership from informed and motivated clinical teams.

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