Universal health coverage and chronic kidney disease in India

Beverley M Essue, ^a Vivekanand Jha, ^b Oommen John, ^b John Knight^c & Stephen Jan^c

Kidney diseases are associated with an estimated 188 million cases of catastrophic health expenditure in low- and middle-income countries.1 The scale of the burden associated with this condition in these countries demands action. Kidney diseases disproportionally affect disadvantaged populations² and reduce the number of productive years of life.3 Furthermore, the prospect of financial burden discourages many patients from undergoing treatment, thereby leading to preventable morbidity and death.

The impact of kidney diseases has been quantified in India, in a cohort of 119 working-age dialysis patients, most of whom lacked health insurance.4 In this cohort, 35/119 (29%) patients died and 16/119 (13%) discontinued dialysis within 12 months. Despite receiving highly subsidized treatment, dialysis patients receiving care in these two sites in northern India still faced high medical out-of-pocket costs: 87.1% of patients in public hospitals were spending over 100% of their monthly income on dialysis compared to 78.9% of patients in private care.4 This expenditure excluded non-medical costs, which can also be substantial.5

As part of its agenda to achieve universal health coverage (UHC) by 2022, the Indian government has committed to establishing at least one eight-station dialysis unit in each of its 688 districts, and is offering free haemodialysis to people living below the poverty threshold.6 The government's ability to meet this commitment will depend not only on increasing its fiscal capacity, but also on the implementation of frugal innovations (such as low-cost dialysis machines⁷ and greater use of non-physician health workers), enhanced early screening interventions8 and better access to home-based peritoneal dialysis. Better access to peritoneal dialysis would potentially mitigate the substantial non-medical

costs associated with travel and lost productivity to attend haemodialysis

While financing reforms to implement UHC are critical to enhancing financial protection of patients with chronic kidney disease, these reforms are not enough. Dialysis and transplantation are highly unaffordable in most low- and middle-income countries, particularly for vulnerable groups.6 Comprehensive health benefit packages must prioritize early screening and treatment of risk factors such as diabetes and hypertension, access to essential medicines and the implementation of public health interventions to prevent disease progression.8 Targeted support programmes are also needed as part of a comprehensive strategy to strengthen financial protection for chronic kidney disease patients. One such programme has been introduced by the Government of Andhra Pradesh and provides grants of 2500 Indian rupees (35 United States dollars) to eligible chronic kidney disease patients to offset out-of-pocket costs,9 providing a potentially useful model for other Indian states.

Coverage for kidney disease care represents perhaps the greatest challenge in achieving UHC in India and most other low- and middle-income countries.10 This is due to the high cost of existing treatments, high disease burden and constrained financial resources. While reforms are needed to better finance health-care services, including dialysis, much can be done to address the economic burden through greater emphasis on prevention and the development of low-cost treatments.7 Most individuals who currently have chronic kidney disease in India face catastrophic health expenditure.1 Achieving UHC will enable timely access to care and prevent thousands of households from falling into poverty due to kidney disease each year.1

- Essue BM, Laba TL, Knaul FM, Chu A, Van Minh H, Phuong Nguyen TK, et al. Economic burden of chronic ill health and injuries for households in low and middle income countries. In: Jamison DT, Gelband H, Horton S, Jha P, Laxminarayan R, Mock CN, et al., editors. Disease control priorities. Volume 9. 3rd ed. Washington, DC: The World Bank: 2018.
- Garcia-Garcia G, Jha V. Chronic kidney disease in disadvantaged populations. Indian J Nephrol. 2015 Mar-Apr;25(2):65-9.
- Stanifer JW, Muiru A, Jafar TH, Patel UD. Chronic kidney disease in low- and middle-income countries. Nephrol Dial Transplant. 2016 06;31(6):868-74.
- Bassi A, John O, Gallagher M, Kotwal S, Joshi R, Essue B, et al. Methodological challenges to collecting clinical and economic outcome data: lessons from the pilot dialysis outcomes India study. Nephrology (Carlton). 2018 Mar 23; (Forthcoming)
- Senanayake SJJ, Gunawardena NS, Palihawadana P, Bandara S, Bandara P, Ranasinghe AU, et al. Outof-pocket expenditure in accessing healthcare services among Chronic Kidney Disease patients in Anuradhapura District. Ceylon Med J. 2017 06
- Jha V. Universal health coverage for dialysis in India – first steps towards change. In: The Lancet Kidney Campaign. New York: Elsevier; 2018.
- Knight J. Perkovic V. The affordable dialvsis prize steams ahead. Lancet. 2016 Mar 12;387(10023):1040.
- 8. George C, Mogueo A, Okpechi I, Echouffo-Tcheugui JB, Kengne AP. Chronic kidney disease in low-income to middle-income countries: the case for increased screening. BMJ Glob Health. 2017 05 29;2(2):e000256.
- CKD patients to get 2,500 as pension. The Hindu. 2017 Sep 2.
- 10. Nugent RA, Fathima SF, Feigl AB, Chyung D. The burden of chronic kidney disease on developing nations: a 21st century challenge in global health. Nephron Clin Pract. 2011;118(3):c269–77.

Correspondence to Beverly M Essue (email: beverley.essue@sydney.edu.au).

^a Menzies Centre for Health Policy, The University of Sydney, Sydney NSW 2006 A, Australia.

^b The George Institute for Global Health, New Delhi, India.

^c The George Institute for Global Health, Sydney, Australia.