

Screening first-degree relatives of patients with Chronic Kidney Disease (CKD) in Pakistan

Amna Ilyas, Bakhtawar Ali

Dear Madam, Chronic Kidney Disease (CKD) poses a worldwide health concern, affecting more than eight hundred million people globally, with underdeveloped nations sharing the greatest disease burden.¹ It's hypothesised that by 2030, countries with less than 15% of the economy will account for over 70% of the patients with ESRD.² Therefore, early detection through targeted screening is crucial in developing countries like Pakistan. However, owing to racial and ethical differences in results, the Kidney Disease Prevention Network unanimously agreed that each country, based on the prevalence of risk factors at a local level, must delineate their own high-risk groups to be screened.²

Recent studies in Pakistan,^{3,4} like those in India,⁵, Nigeria,⁶ and China,⁷ have shown evidence of clustering of CKD in first-degree relatives, making them an important target population for screening. Nonetheless, due to the lack of proper screening in Pakistan, there are delays in management as well as referrals to nephrologists, even among individuals with a strong family history of CKD.

In Pakistan, where access to dialysis therapy is already limited due to the continuously increasing per-person cost of dialysis and lack of availability, we must shift the focus towards screening high-risk populations to prevent strain on the economically vulnerable. The targeted screening of first-degree relatives will not only save millions spent on dialysis and renal transplants but will also reduce the recruitment costs of screening as the family members are in constant contact with the healthcare system. Moreover, since they're also firsthand witnesses to the financial and physical impact of delayed diagnosis, family members of CKD feel more motivated to actively participate in screening programmes.

Allama Iqbal Medical College, Lahore, Pakistan.

Correspondence: Bakhtawar Ali. e-mail: bakhtawarali98@gmail.com

ORCID ID: 0009-0004-9484-1309

Submission complete: 24-01-2024

Review began: 06-03-2024

Acceptance: 15-06-2024

Review end: 12-06-2024

Considering the above, it is imperative to conduct more extensive clinical trials and assess the efficacy of screening, including opportunistic screening in dialysis units as well as outdoor settings, of first-degree relatives in Pakistan.

Acknowledgement: I would like to express my sincere appreciation for the editorial team of JPMA for providing us with the opportunity to submit this letter. Additionally, I extend my gratitude to everyone who reviewed this for us for their insightful comments, which have undoubtedly strengthened the content of this letter. Thank you to all those involved in the editorial process for their dedication in maintaining the high standards of the journal.

Disclaimer: None.

Conflict of interest: None.

Funding disclosure: None.

DOI: <https://doi.org/10.47391/JPMA.20018>

References

1. Kovesdy CP. Epidemiology of chronic kidney disease: an update 2022. *Kidney Int Suppl* (2011) 2022;12:7-1. doi: 10.1016/j.kisu.2021.11.003
2. Mahdavi-Mazdeh M. Why do we need chronic kidney disease screening and which way to go? *Iran J Kidney Dis* 2010;4:275-81.
3. Kumar J, Butt G, Maqbool F. Screening for Chronic Kidney Disease in Family Members of Dialysis Patients. *J Rawalpindi Med Coll* 2017;21:262-4.
4. Abbas R, Elahi T, Manan S; Suraj. The prevalence and risk factors of kidney disease in first degree relatives of patients with ESRD treatment - single center study. *J Pak Med Assoc* 2023;73:2397-402. doi: 10.47391/JPMA.10927
5. Bagchi S, Agarwal SK, Gupta S. Targeted screening of adult first-degree relatives for chronic kidney disease and its risk factors. *Nephron Clin Pract* 2010;116:c128-36. doi: 10.1159/000314662
6. Raji YR, Mabayoje MO, Bello BT, Amira CO. Albuminuria and Reduced Estimated Glomerular Filtration Rate among First-degree Relatives of Patients with Chronic Kidney Disease in Lagos, Southwest Nigeria. *Indian J Nephrol* 2018;28:21-7. doi: 10.4103/ijn.IJN_225_16
7. Kong X, Liu L, Zuo L, Yuan P, Li Z, Li W, et al. Association between family members of dialysis patients and chronic kidney disease: a multicenter study in China. *BMC Nephrol* 2013;14:19. doi: 10.1186/1471-2369-14-19

Author Contribution:

AI: Data curation, resources, writing, review and editing.

BA: Concept, data curation, resources, supervision, writing, drafting.