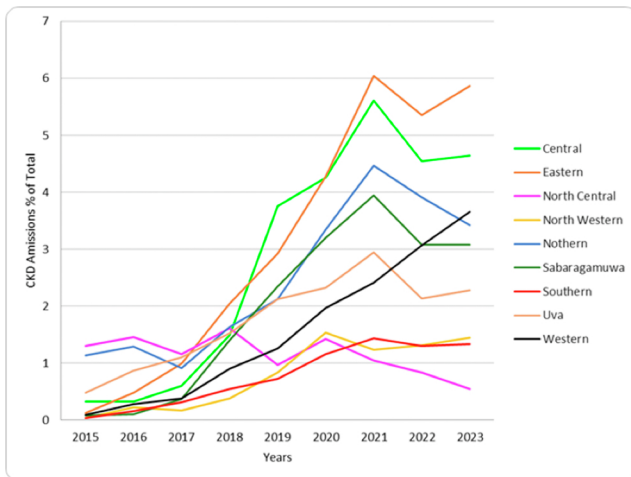
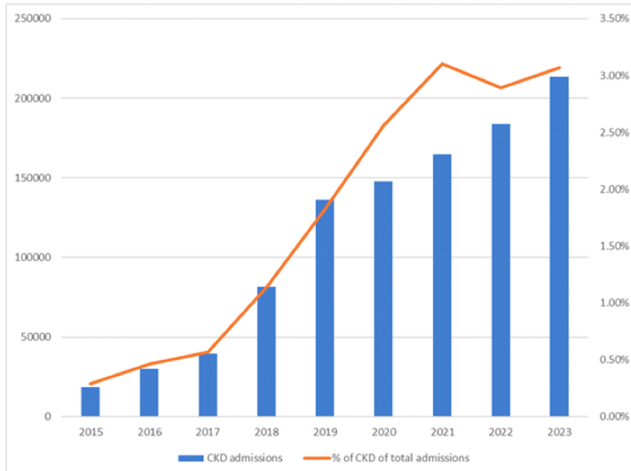


Results: There was a total of 1,047,612 hospital admissions due to CKD recorded between 2015 and 2023. There was a consistent male predominance (approximately 2:1) throughout the period. The mean age at admission declined from 57.9 ± 16.3 years in 2015 to 54.5 ± 14.8 years in 2023, with the predominant age group shifting from 61–70 years in 2015 to 51–60 years from 2016 onward. Annual CKD admissions increased steadily from 18,629 in 2015 to 213,670 in 2023 (Figure 1). The proportion of CKD admissions among total hospitalizations rose from 0.3% in 2015 to 3.07% in 2023, indicating a tenfold relative increase in the burden of CKD on inpatient services.



Provincial trends showed a similar upward pattern in all regions except the North Central Province, where the proportion of CKD admissions declined from 1.3% in 2015 to 0.55% in 2023. The most marked rise occurred in the Eastern Province, increasing from 0.12% in 2015 to 5.87% in 2023 (Figure 2). The overall in-hospital mortality among CKD admissions declined from 5.2% in 2015 to 0.8% in 2023, remaining below 1% since 2020.

Conclusion: Hospitalizations due to CKD in Sri Lanka increased markedly between 2015 and 2023, with a shift toward younger age groups. Although most provinces showed rising trends, the North Central Province, the traditional CKDu-endemic area, demonstrated a sustained decline in CKD admissions. This may indicate the success of community-level interventions such as improved access to safe water and early detection programs. However, the continued national rise despite this regional reduction suggests an increasing contribution of

diabetes and hypertension to the CKD burden and the possible emergence of CKDu beyond its historic hotspots.

I have no potential conflict of interest to disclose.

I did not use generative AI and AI-assisted technologies in the writing process.

WCN26-5676

BARRIERS TO GROWTH OF PERITONEAL DIALYSIS IN BERMUDA: A 10-YEAR (2015-2025) ANALYSIS



(Article No. 104829)

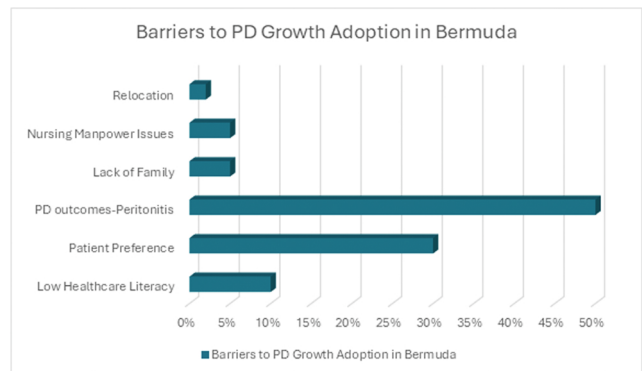
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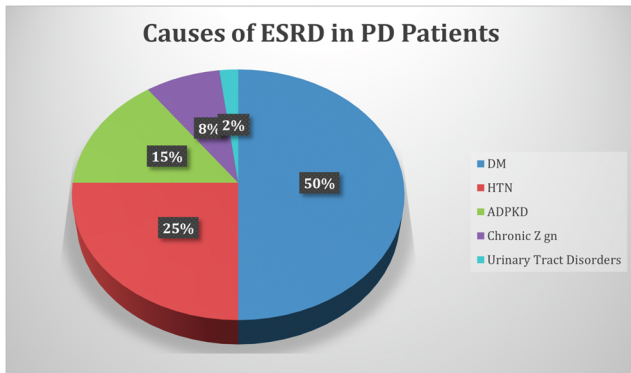
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Introduction: The cost and lifestyle advantages of peritoneal dialysis (PD) over hemodialysis (HD) are well known. However there is evidence that PD adoption globally is hamstrung by cost and other barriers.[1]. In resource-poor settings in middle-income and low income countries, these limitations may be more profound. Globally, only about 11 % of dialysis patients use PD, and majority of these are in China, USA, Mexico or Thailand. [2]. In this report we review a successful increase in PD adoption over a ten year period in Bermuda, and highlight some identified success factors. Our findings have implications on strategies to increase adoption in resource-poor settings.

Methods: Retrospective Analysis of ten year growth of PD in Bermuda (from 2015-2025). We reviewed the causes of ESRD in Bermuda over the period which revealed that Diabetes mellitus was present in 136 dialysis patients (50%), followed by hypertension in 110 patients (25.4%), followed by ADPKD, Glomerulonephritis and urinary obstruction as shown in Figure 1. Over that period we reviewed the change in proportion of dialysis patients who chose PD, as well as factors contributing to those who chose not to do PD. Some patients received urgent start PD, while others met with a general surgeon and placement of PD Catheter was planned. We compare PD survival in those who had a planned PD Catheter placement with those who were placed as urgent start within 72 hours of an overwhelming need to do PD. Out of 20 patients who received urgent start PD catheter placement, only 5 transitioned successfully to stable PD (20%). In those who had planned scheduled PD catheter placement, successful, PD eventuated in 55/56 (98.2%). The average duration on PD in Bermuda was 5.4 years; the causes of exit from PD were Peritonitis 80%, Patient preference 12%, lack of family support 3%, and low literacy 1%, relocation out of island 2%. 8 patients were transplanted over the period, but was not considered a loss from PD, as this was an anticipated and desired outcome. By summer of 2025, PD program has grown to 62 patients, out of 198 dialysis patients in Bermuda, yielding PD utilization of 32%. Drop out from catheter -related complications was minimal due to presence of a general surgeon trained in laparoscopy, as well as enhanced training of nurses and patients.

Results: The barriers to PD & causes of ESRD in Bermuda are shown in Figure 1&2 Below.





Conclusion: Over the period 2015-2025, PD grew from 5% to 32% of dialysis patients. The availability of a general surgeon trained in laparoscopy to manage early & catheter complications such as hernia, and laparoscopic catheter reposition was instrumental in reducing transfers to HD. A planned process of PD initiation was more sustainable than urgent start PD catheter placement, in our experience. An educational program for nurses and patients in the Island also played a role in the sustained growth rate recorded in Bermuda to 32% of dialysis patients being on PD. Our experience provides instructive lessons on how to grow PD adoption in resource-poor settings.

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2. Okpechi GI, Levin A, Tungsanga S, et al. Progress of nations in the organization of, and structures for, kidney care delivery between 2019-2023: cross sectional survey in 148 countries. *BMJ* 2024;Oct 14;387:e079937

I have no potential conflict of interest to disclose.

I did not use generative AI and AI-assisted technologies in the writing process.

WCN26-5715

EPIDEMIOLOGY OF AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE IN THE NORTH RIYADH AREA



(Article No. 104830)

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Introduction: Autosomal Dominant Polycystic Kidney Disease is defined as a multisystem and progressive disease with bilateral renal cysts formation accompanied by kidney enlargement and other organ involvement, such as the heart, liver, pancreas, spleen, and arachnoid membranes.

International prevalence is around 1 cases in 1000 population. It is very well observed by physicians the high number of patients that we see in clinical practices compared to international prevalence.

Methods: It was a cross sectional study that is open for general population to do Ultrasound screening for diagnosis of Autosomal Dominant Polycystic Kidney Disease. Followed by detailed investigations in positive patients that include dictated Ultrasound imaging, clinical examination, and blood tests related to the disease.

Results: The general prevalence was 33 cases out of 420 cases screened at community level which equals to 7.5% prevalence among screened group and 75 cases every 1000 cases. Majority of the positive patients were among age group from 30-59. Most patients were in group 1-2 Chronic kidney disease as this study was done on general population. Obesity were noticed as 40 % of positive patients were obese. Vitamin D low level were observed in 63% of positive patients.

Conclusion: Autosomal Dominant Polycystic Kidney Disease is highly prevalent among population of north Riyadh region. Screening

Programs are highly needed over the community level to discover more cases and to establish medical management.

I have no potential conflict of interest to disclose.

I did not use generative AI and AI-assisted technologies in the writing process.

WCN26-5721

APOL1-MEDIATED KIDNEY DISEASE IN THE UNITED STATES (2020-2025): TRENDS IN RESEARCH OUTPUT, PUBLIC AWARENESS, AND FEDERAL FUNDING



(Article No. 104831)

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Introduction: Variants in the *APOL1* gene, initially identified for their protective effect against *Trypanosoma brucei*, were first linked to kidney disease in 2008 and are now recognized as major risk factors for end-stage kidney disease (ESKD). The high-risk *APOL1* variants (G1 and G2) occur almost exclusively in individuals of African ancestry, with about 13% of African Americans, nearly six million people carrying two risk alleles. *APOL1*-mediated kidney disease (AMKD) includes non-diabetic renal disorders such as focal segmental glomerulosclerosis (FSGS), hypertensive ESKD, lupus nephritis-related ESKD, and HIV-associated nephropathy. Individuals with high-risk genotypes have a 15-30% lifetime risk of ESKD. Although limited financial data exist, AMKD's strong link to dialysis dependence highlights its substantial economic and societal burden.

Methods: We conducted a 5-year PubMed literature search using the terms "APOL1" and "Kidney." Metadata, including publication date, author affiliations, and journal of publication, were extracted and analyzed with R. Additionally, we performed a 21-year infodemiology analysis using Google Trends to evaluate search activity in the United States for "APOL1 Gene" and related terms from January 2004 to October 2025. Temporal and geographic patterns were assessed, with particular attention to peaks, troughs, and seasonal fluctuations. Finally, we analyzed research grants related to APOL1, examining their geographic distribution, funding amounts, and stated research objectives.

Results: Between January 2020 and May 2025, 490 PubMed-indexed articles were reviewed. The majority of data originated from institutions based in New York, Washington, and North Carolina. Publication activity peaked in 2021 with 96 articles. Analysis of Google Trends data revealed minimal search interest in "APOL1 Gene" since 2004, with related or alternative search terms yielding no results, reflecting low public and research engagement with the topic. The journals publishing the highest number of *APOL1*-related kidney disease studies included *Kidney International Reports*, *Clinical Journal of the American Society of Nephrology (CJASN)*, and *Kidney International*. Public research funding declined in 2021 but has since increased, reaching a peak of over \$36 million in 2024, when 77 projects were funded, the highest annual total observed during the study period.

APOL1 Research Affiliations by U.S. State

