From the Desk of Editor in Chief

Dr. Rubina Naqvi
DOI: 10.53778/pjkd102372

A Paradigm Shift at Home: Peritoneal Dialysis and the Future of Renal Care in Pakistan

Pakistan faces an escalating public health crisis regarding End Stage Renal Disease (ESRD), with approximately 22,000 patients requiring maintenance dialysis annually to sustain life. The conventional standard of care across the country is in-center Hemodialysis (HD). However, HD poses systemic challenges: patients endure frequent, costly travel to urban medical centers, face the severe risk of blood-borne viral infections (like Hepatitis B, C and HIV), and struggle with the persistent logistics of scheduling the potential of peritoneal dialysis as a cost-effective and sustainable treatment option.

Peritoneal Dialysis (PD), form of renal replacement therapy, utilizes the patient' s own abdominal lining as a natural biological filter, offering remarkable flexibility. Patients can perform exchanges in the comfort of their homes, preserving residual renal function, freeing up critical hospital beds, avoiding exposure of blood born viral infections and significantly reducing hidden travel and lost-workday costs.

In Pakistan; first PD facility in form of Intermittent Peritoneal Dialysis (IPD), was started in Civil Hospital Karachi in 1970, Continuous Ambulatory Peritoneal Dialysis (CAPD) started in 1998 but remained on limited scale.[1] Historically, there was hesitation in starting CAPD or Automated Peritoneal Dialysis (APD) with use of cycler, for fear of infection and mostly for the reason of non-availability of exchange fluid in local market. However, Pakistan Society of Nephrology (PSN) International Conference in October 2019 marked the initiation of a robust collaborative relationship with the International Society of Peritoneal Dialysis (ISPD) and PSN any many centers in province of Punjab and Indus Hospital in province of Sindh started regular CAPD programs after training doctors, nurses and para-medics.

A detailed insights of the modality and its shape in Pakistan has already been published in same journal in 2020.[2] Now with locally manufactured APD Cycler, this modality is also in use and a report of these

patients was published in 2024.[3] With further progress and detailed report of different PD modalities and centers performing it will be seen in an article in same issue of the journal.

Pakistani nephrologists must look beyond the convenience of the hemodialysis clinic. By building a robust infrastructure for peritoneal dialysis, the medical community can offer ESRD patients an evidence-based, sustainable treatment path that restores autonomy and improves long-term survival.

References:

1. Naqvi R, Hashmi S. Nephrology in Pakistan. In Book Nephrology Worldwide 2021 Mar 4 (pp. 377-386). Cham: Springer International Publishing.
2. Qayyum A. Peritoneal Dialysis in Pakistan: An Insider' s View. State of Affairs and Planning? PJKD 2020;4(supplement 1):6-10.
3. Qayyum A, Sabir O, Riaz MM, et al. Improving self-dependency in Pakistan: experience of a locally prepared automated PD machine. *Perit Dial Int* 2024; 44(4): 287 – 291