

## **The prevalence and severity of the symptom burden in patients with End Stage Renal Disease (ESRD) in a resource limited setting**

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### **Abstract**

**Introduction:** Globally, kidney failure is increasing. In South Africa, limited access to kidney replacement therapy (KRT) necessitates urgent improvement in kidney supportive and palliative care.

**Methods:** This prospective, cross-sectional, mixed-method study was conducted at two Cape Town hospitals from June 2021 to June 2023. Participants with end-stage kidney failure (n=75) were categorized into three groups: receiving dialysis, on the waiting list, and ineligible for state-funded KRT (category 3). Data collection included demographics, comorbidities, and social circumstances. The iPOS-renal questionnaire assessed symptom burden, complemented by qualitative insights from open-ended interviews, which underwent thematic analysis.

**Results:** The cohort was young, with a median age of 40 (33-45) years, and faced significant poverty, commonly experiencing weakness/lack of energy (64%). Patients on the waiting list and those in category 3 had a higher symptom burden. Category 3 patients had the highest prevalence of shortness of breath (p=0.006), dry mouth (p<0.001), poor mobility (p=0.007), and restless legs (p=0.038). Emotional symptoms were prevalent across all groups. Category 3 patients experienced the most severe physical symptoms, including shortness of breath (p=0.003), sore/dry mouth (p<0.001), drowsiness (p=0.028), and poor mobility (p<0.001). They also experienced the highest levels of personal anxiety (p<0.001), family anxiety (p=0.037), and appointment time wastage (p=0.021). Qualitative findings highlighted concerns for families, fears about unfulfilled lives, and the need for better access to information.

**Conclusion:** Limited literature exists on symptom burden in conservative kidney care with dialysis rationing. Recommendations advocate early multidisciplinary team involvement, improved patient and family support, and enhanced palliative care training.