

**A Review of a Nurse-Led
Multidisciplinary Pre-Dialysis
Education Programme and its Effect
on Timely Vascular Access Creation in
the Casablanca-Settat Region: An
African Perspective**

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| Abstract

Chronic kidney disease is a significant health burden in Africa, with the timely creation of permanent vascular access remaining a critical challenge for haemodialysis patients. In the Casablanca-Settat region, late referral and inadequate patient preparation often result in suboptimal access and greater reliance on temporary catheters, which are linked to higher morbidity and cost. This review aimed to evaluate the implementation and impact of a nurse-led multidisciplinary pre-dialysis education programme in the Casablanca-Settat region. Its primary objective was to assess the programme's effect on improving the rate of timely permanent vascular access creation before dialysis initiation. A narrative review was conducted. Published literature, regional programme reports, and relevant grey literature pertaining to the specified programme were systematically identified and synthesised. The analysis focused on programme structure, educational content, multidisciplinary roles, and reported clinical outcomes. The review found an association between the nurse-led programme and improved timely vascular access creation. A principal outcome was a reported increase in patients starting haemodialysis with a functional arteriovenous fistula, from a baseline below 20% to approximately 65% post-implementation. Thematic analysis identified enhanced patient empowerment and better interdisciplinary coordination as key facilitating factors. The nurse-led multidisciplinary pre-dialysis

education programme appears to be an effective model for improving vascular access outcomes in this African setting. It highlights the important role of structured, patient-centred education and nurse-led coordination in pre-dialysis care. Programme sustainability requires secured funding and formal integration into national renal care guidelines. Further research should investigate cost-effectiveness and adaptability to other African regions. Training for nurses in advanced counselling and coordination roles is also advised. pre-dialysis education, vascular access, nurse-led, multidisciplinary team, arteriovenous fistula, haemodialysis, chronic kidney disease, Africa. This review provides an African perspective on a nurse-led intervention, synthesising evidence on its potential to improve a key clinical outcome in resource-limited settings and offering practical recommendations for clinicians and policymakers.
