

ORIGINAL RESEARCH

Determinants of adherence to dietary restrictions among patients with chronic kidney disease undergoing hemodialysis: A Systematic review

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Abstract

Background: Adherence to dietary recommendations is the cornerstone of preventing and managing complications as well as slow progression of chronic kidney disease and compensate for impaired renal function and/ or limitations of treatment modalities. Malnutrition increases the risk of morbidity and mortality among patients with CKD undergoing dialysis. Dietary restrictions associated with CKD add to the potential for inadequate nutrient intake. **Objectives:** The aim of this systematic review was to synthesize information on determinants of adherence to dietary restrictions among patients with chronic kidney disease undergoing hemodialysis in low- and middle-income countries so as to enhance nutrition education and counseling knowledge among nutritionists, dieticians, nurses and nephrologists in order to formulate effective strategies that combat non-adherence in CKD patients. In addition, a systematic review showing the determinants of adherence to dietary restrictions among patients with chronic kidney disease undergoing hemodialysis in low- and middle-income countries has not yet been published. **Methodology:** Original studies on adherence to dietary restrictions among CKD patients undergoing hemodialysis that were published between 2015 and 2025 in low- and middle-income countries were included in the systematic review. In May & June 2025, literature search was conducted in Pub Med, Clinical Key, EBSCO, google scholar and grey literature. The search strategy included the search terms “chronic kidney disease”, “hemodialysis” and “dietary restriction”. **Results:** Determinants of adherence to dietary restrictions among patients with chronic kidney disease undergoing hemodialysis in low- and middle-income countries that were statistically significant were identified as: flexibility in the diet, difficulties following diet recommendations, adherence to fluid restriction, monthly income/ material support/ finances, education level and frequency of health education. **Conclusion:** Patients and their families should be educated on non-compliant behaviors and their consequences, which may bring down the dietary adherence rate. Prescribed diets should be guided by the patient’s usual dietary habits and assess levels of challenges in their food environment in using such diets, and the diet-related messages should be integrated with fluid restriction messages to increase chances of adherence to the diet prescriptions.

Key words: Chronic kidney disease, hemodialysis, dietary restriction, determinants of adherence, diet recommendations