Series 2 – Social Pillar: Health

Patients with Chronic Kidney Disease: How Can They Make Informed Nutritional Decisions?

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Key Messages

The Ministry of Health and partners should develop national standard operating procedures and IEC materials in renal nutrition counselling for harmonized messages.

All patients with chronic kidney disease should get takeaway information leaflets with patient-specific simple nutrition messages to ensure the accuracy of nutrition information;

All nutritionists and healthcare workers in renal units should participate in regular continuing nutrition education on most recent evidence-based nutrition information.

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Context

In chronic kidney disease (CKD), the kidney's functions of removal of waste product from the body are gradually impaired, causing the death of over 2.4 million people globally (International Society of Nephrology, 2018). The existing therapy for CKD is either dialysis or kidney transplant alongside modification of lifestyle behaviours. Successful dialysis therapy for patients with CKD requires adherence to diet prescriptions to avoid further accumulation of waste products in the blood and development of infections (Campbell & Rossi, 2014; Rysz, Franczyk, Ciałkowska-Rysz, & Gluba-Brzózka, 2017).

Although diet is one of the most modifiable lifestyle factors in the management of patients with CKD, adherence to dietary prescriptions is a challenge for most patients (Herselman, 2008). There is limited accessible documented information, particularly in Sub-Saharan Africa on CKD (Stanifer et al., 2014; Yang et al., 2020). Additionally, the reasons why patients with CKD on hemodialysis and their family caregivers fail to adhere to the diet prescriptions in the African context are not clearly understood.

In our study, we attempted to examine adherence to diet prescriptions among adult patients with CKD on hemodialysis at the national teaching and referral hospitals in Kenya.

Approach and Results

This policy brief is based on data from a cross-sectional mixed-method study that employed both qualitative and quantitative data collection approaches among adult patients with CKD undergoing haemodialysis and their family caregivers. The study was conducted at renal clinics and wards in Kenyatta National Hospital and Moi Teaching and Referral Hospital in Kenya. The research findings were triangulated with key stakeholders groups. To our knowledge, this was the first study in Kenya on adherence to diet prescriptions among adult patients with CKD on hemodialysis.

About 64% of patients with CKD on hemodialysis at the national referral hospitals in Kenya did not adhere to their diet prescriptions. This implied that three out of every five adult patients with CKD on hemodialysis were at risk of disease complications and death due to non-adherence to prescribed diets. For the patients who found the diet prescriptions unattainable, it was challenging for them to implement the diets as prescribed (Adjusted odds ratio: 0.24, 95% confidence interval: 0.13 – 0.46, P<0.001). Additionally, those who considered the diet prescriptions as flexible and in harmony with their routine feeding practices were almost three times more likely to follow the diet prescriptions compared to those who considered the diets to be restrictive (Adjusted odds ratio:2.65, 95% confidence interval:1.11 - 6.30, P:0.028).

Among the reported problems that hindered the patients and caregivers from adhering to their diet prescriptions in this

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study was the mixed and, sometimes, confusing nutrition information which led to dietary intake based on inaccurate nutrition information. This finding suggests that patients lack harmonized nutritional guidance; hence, they make uninformed decisions concerning their dietary intake. This contributes to the consumption of unhealthy foods which only negate the effects of dialysis, thereby increasing the risk of death of these patients as well as undermining the efforts of the healthcare system in the management of patients with CKD.

Current State of Nutrition Counselling for patients with CKD

In Kenya, nutrition counselling for patients with CKD is currently guided by the National Clinical Nutrition and Dietetics Reference Manual (GoK, 2010), and in some facilities, facility-based clinical nutrition manuals and protocols. However, some of the recommended diets are based on international clinical nutrition guidelines. The patients in Kenya, particularly those from rural or resource-constrained urban households may, however, find food items suggested in these guidelines unsuitable or inaccessible. Although the Ministry of Health launched the updated Kenya National Food Composition Tables (FAO/GoK, 2018) based on locally available foods in 2019, most nutritionists at health facility level have not been trained on the use of this resource in diet prescriptions.

Policy Recommendations

Short-Term

- The Ministry of Health (MOH) and partners should develop a national standardized nutrition protocols based on kidney disease staging, the existing and emerging co-morbidities, type of replacement therapies for paediatrics and adults, as well as locally available foods and resources
- MOH and partners should support the development of national standard operating procedures and IEC materials including take-away information leaflets with patient-specific simple renal nutrition messages for patients with CKD to ensure harmonized message delivery based on current evidence-based clinical nutrition and sustainability of individualized nutritional care;
- All nutritionists and dieticians in health facilities with dialysis services and renal clinics should receive a specialized training package on renal nutrition and participate in regular continuing nutrition education to deliver a harmonized package of quality nutrition care to renal patients.

Medium-Term

- The health facilities that have nutrition protocols should ensure that these documents are regularly updated based on the national clinical nutrition guidelines, existing and emerging co-morbidities as well as locally available foods and resources. The facilities without such protocols should make efforts to develop them.
- Healthcare workers in renal units should ensure that they possess the basic knowledge of renal diets and always refer the patient to the nutritionist/dietician for individualized nutrition counselling.
- MOH should promote renal nutrition research and establishment of renal nutrition research grants and global funding networks.

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