How effective are renal dietitians? An evaluation of practice!

Mr Jack Chilton, Ms Linda Tarm
1Guy’s And St Thomas’ NHS Foundation Trust, London, United Kingdom

INTRODUCTION:
The Department of Health and Social care (2010) makes it clear that NHS Services must focus on and aim to achieve better outcomes. Additionally, in the current NHS financial climate, it is crucial that dietitians are able to show that dietetic interventions are effective. It was decided that outcomes to evaluate the effectiveness of our interventions for the management of hyperkalaemia and hyperphosphatemia in a sample of chronic haemodialysis (HD) patients would be collected. We used the British Dietetic Association Renal Nutrition Group Outcomes Tool (RDOT) (British Dietetic Association 2016).

METHODS:
Three dietitians collected the outcomes between April-October 2018. Patients from the three HD units were included if they met the criteria (Figure 1). During the six months, for every patient seen face-to-face for hyperkalaemia or hyperphosphatemia, their relevant information was added to the RDOT (Figure 2). In November 2018, the patients’ final blood results were added to the RDOT, including any further necessary information as per the RDOT (Figure 3). During the project, the dietitians met to discuss any issues arising and to ensure consistent practice and data collection as per the project guidelines.

Patients were classified as having ‘achieved’ or ‘not-achieved’ their planned treatment goal if their final blood potassium (4-6mmol/L) or phosphate (1.1-1.7mmol/L) in November was either within or outside the target range, respectively. All data collected was then analysed to help determine effectiveness of dietetic interventions. Analysis involved determining percentage of achievers and non-achievers, number of corresponding barriers, and the most common and effective interventions.

RESULTS:
88 patients were included in the project i.e. 40 and 48 for patients’ blood potassium and phosphate outcomes, respectively.

73% of patients seen for hyperkalaemia achieved a blood potassium within target range. 21% of these patients had more than one barrier. 27% of patients seen did not achieve their target blood potassium. 45% of these patients had more than one barrier. Education was the most common intervention. Of those patients receiving education, 74% achieved their aim, whilst 26% did not. Using behavioural change techniques was the most successful intervention, with 89% of these patients achieving their outcome, whilst 11% did not.

46% of patients seen for hyperphosphatemia achieved a blood phosphate within target range. 32% of these patients had more than one barrier. 54% of patients seen did not achieve their target blood phosphate. 31% of these patients had more than one barrier. Education was the most common intervention. Of those patients receiving education, 54% achieved their aim, whilst 46% did not. Identifying barriers and adapting advice for hyperphosphatemia patients was the most successful intervention, with 100% achieving their outcomes.
DISCUSSION:
The results show that a greater percentage of patients with hyperkalaemia achieved their target blood results after dietetic intervention, compared with those seen for hyperphosphatemia. Based on the results, it is prudent that dietitians identify patients’ barriers to change and adapt their advice accordingly to address hyperphosphatemia. Additionally, dietitians should consider adapting their interventions for hyperkalaemia patients to include behaviour change techniques, rather than just educating patients.