Knowledge of renal diet amongst haemodialysis unit nursing staff: Results from a multicentre based questionnaire

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INTRODUCTION: Patients with end-stage kidney disease may undergo haemodialysis as treatment of their condition. The majority of patients choose in-centre haemodialysis. As well as haemodialysis, patients usually have to follow dietary restrictions to maintain biochemistry levels. Dietary advice should be tailored and most patients have access to a renal dietitian. It is acknowledged, however, that dialysis unit nursing staff also provide diet related advice to patients. In order to get an understanding of the level of dietary knowledge, nursing staff employed at our Trusts haemodialysis units were invited to complete a questionnaire.

METHODS: A renal dietitian devised a questionnaire with 26 questions about potassium, phosphate, fluid and salt to determine whether nursing staff provide diet related advice, their confidence levels and knowledge of these areas. Respondents were asked to identify foods rich in potassium and phosphate from a list of 36, this corresponded with available patient dietary information. Nursing staff were also asked whether they adjust patient’s dry weights and what factors they considered. Finally nurses were asked if they would like further diet related education and their preferred delivery format.

RESULTS: Thirty nine questionnaires were returned. 76% of respondents were nurses, 14% healthcare assistants and 10% dialysis assistants. 87% had worked within renal dialysis for more than one year. Most nursing staff provided diet advice with 78% discussing potassium, 62% phosphate, 51% salt and 92% fluid. Confidence levels in giving advice for different topics are detailed in table 1, more than half were confident or very confident in giving advice in all topics. 49% and 57% of respondents were able to identify the correct target biochemistry range for potassium and phosphate respectively. Identification of foods rich in potassium and phosphate are summarised in table 2, many identified incorrectly. Respondents were asked apart from diet what else can contribute to hyperkalaemia and hyperphosphatemia. Medication was identified by 83% and problems with access by 80% for hyperkalaemia but only 43% answered high blood sugars. For hyperphosphatemia 80% identified missing or cutting short dialysis, 51% identified problems with access and 20% incorrectly thought high blood sugars. Asking about fluid allowance 95% of respondents knew this was dependent upon urine output, but only 33% advised on specific fluid allowances. Dry weights were adjusted for patients by 78% of respondents but only by +/- 0.5kg, and factors such as oedema, breathlessness and cramps were considered. 97% would like further dietitian led education around diet and preferred single topics at their own units.

DISCUSSION:
The questionnaire results indicate that whilst confidence levels around renal diet are high amongst haemodialysis nursing staff the level of knowledge was variable and may result in patients receiving incorrect dietary advice. What is reassuring is that nurses are interested in dietitian led training which is planned to be delivered later this year. The questionnaire will be repeated after this training to assess improvements in knowledge.