

# Nutritional Assessment of a Peritoneal Dialysis population: an analysis of the dietetic intervention and nutrition education.

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## Introduction

- Peritoneal dialysis (PD) patients undergo nutritional assessment by the Renal Dietitian every 6 months.
- Assessment includes Subjective Global Assessment (SGA) and the assessment of biochemical parameters against Renal Association Standards and nutritional interventions are then provided.

## Aim

- To examine the nutritional status of the PD population and define the types of dietetic interventions that are provided.

## Methods

- Data was collected prospectively from January 2014 to December 2014.
- This included the SGA score, Body Mass Index (BMI) and biochemistry, and the type of dietary intervention provided by the renal dietitian.

## Results

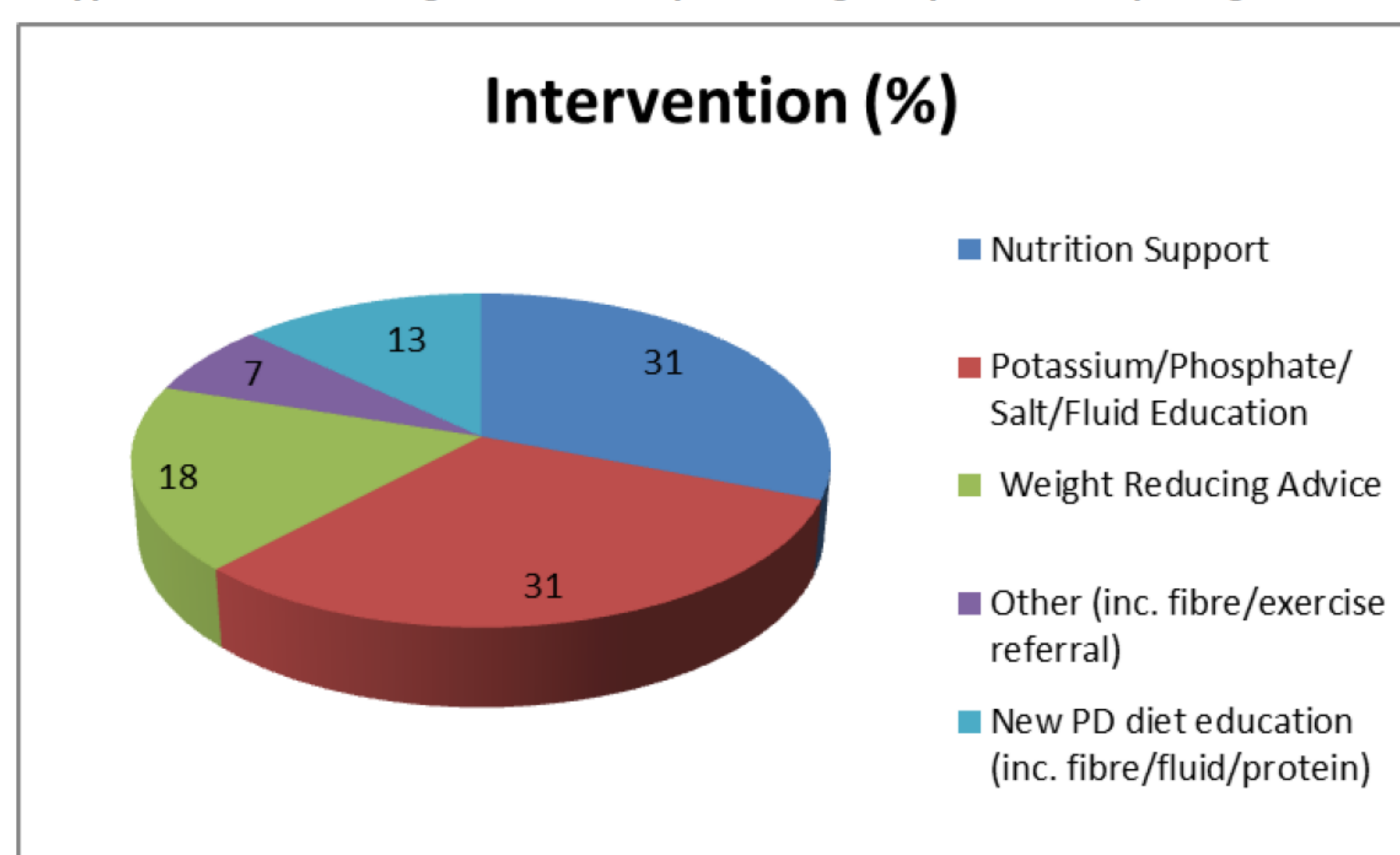
- 110 patients (35 female and 75 male) with a mean age of 58.7 ( $\pm 17.1$ ) years, had at least 1 nutritional assessment conducted;
- Patients underwent an average of 1.5 nutritional assessments in this period.
- The mean BMI of the population was 27.4 ( $\pm 4.8$ ) kg/m<sup>2</sup> and BMI ranged from 17.0 to 46.8kg/m<sup>2</sup>.

**Table 1. Nutritional status and BMI of the PD population**

	SGA A Well Nourished	SGA B Malnourished
<b>Total PD population</b>	<b>81%</b>	<b>19%</b>
	Mean BMI (SGA A)	Mean BMI (SGA B)
<b>Mean BMI by nutritional status</b>	<b>28.1kg/m<sup>2</sup>*</b>	<b>24.3kg/m<sup>2</sup>* (p=&lt;0.001)</b>

- The mean potassium was 4.4mmol/L (range 3.3-6.6mmol/L), 14% had a potassium over 5.5mmol/L.
- The mean phosphate was 1.54mmol/L (range 0.8-2.41mmol/L), 30% had a phosphate over 1.7mmol/L.
- **In 95% (153/161) of the consultations, dietary assessment indicated a need for intervention (Figure 1).**

**Figure 1. Type of intervention given and the percentage of patients requiring each intervention**



## Conclusions

- Despite only 19% of the population being malnourished 31% of the interventions provided included education and/or nutritional supplements for nutrition support, suggesting that to maintain the well-nourished status in this PD population, patients may still require ongoing nutrition support even when they are assessed as well nourished.
- The use of dietary assessment by dietitians identified nutritional causes for electrolyte and fluid disturbances which led to individually tailored dietary modification.
- Overall malnutrition may have been reduced in this cohort of patients due to the individual tailored dietetic interventions, as opposed to generalised dietary restrictions.