Therapeutic compliance in haemodialysis patients. Can nurses improve it?

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Introduction

Adherence to therapies is a primary determinant of treatment success. The non-compliance of a patient with pharmacological prescriptions is now universally recognized as a frequent problem that increases the costs of care. The causes of unscrupulous compliance can be various:

age, physical condition related to the disease, type of therapy, pharmaceutical form, high cost and difficulty in supply, failure to accept the disease, fear of side effects of drugs.

In patients on hemodialysis (HD), a "non-adherence" to therapy may have important relapses, both clinical (pressure imbalances, poor dialysis tolerance, heart rhythm disturbances, nausea, vomiting, abdominal pain, malnutrition, increased morbidity and mortality in general), and economic, with an increase in the number and duration of hospitalizations.

Objectives

The purpose of this study was to evaluate the therapeutic compliance of patients on HD.

Methods

In November 2018 the Morisky Medication Adherence Scale (MMAS-8) was administered in 2 Dialysis Units on a sample of 108 patients(pts).

The MMAS-8, an update with greater sensitivity of the four-item scale published in 1986 and considered the most commonly used self-reporting method to determine adherence. It contains eight questions with closed dichotomous (yes/no) answers, designed to prevent the bias of positive responses from patients questions asked by health professionals, by reversing the responses related to the interviewee's adherence behavior. The degree of adherence was determined according to the score resulting from the sum of all the correct answers: high adherence (eight points), average adherence (6 to < 8 points) and poor adherence (< 6 points).

The HD compliance was measured by analyzing the dialysis treatments of the last 3 months: mean Kt/V values, effective treatment time and displaced dialysis sessions. Dietetic compliance was measured using the laboratory values for Phosphorus and Potassium pre-dialysis (pre HD) of the same period; for the correct intake of liquids, the hydration status was assessed using the bioimpedance analysis.

In May 2019 the nursing staff implemented an educational program for patients and their caregivers. In July 2019 My Companion APP was implemented in the dialysis units. This APP is usable on any smartphone or portable device and offers many features to help patients and health care providers to improve medication-taking behavior.

Results

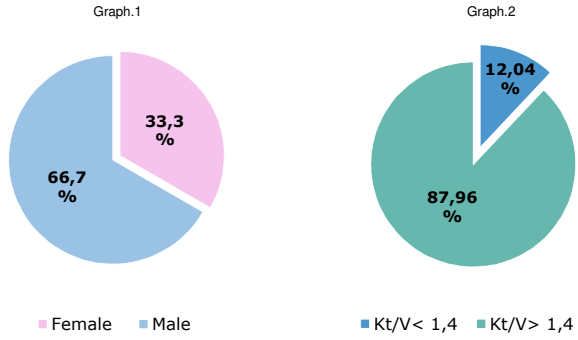
102 pts (94%) out of the 108 enrolled, completed the questionnaire. 66.7% were men, and the mean age was 69.1 years. 68.6% of the participants showed a high adherence to the prescribed drug therapy, 20.6% average and 10.8% low. 87.96% of pts achieved an average Kt/V> 1.4, the mean dialysis time was 235.62 minutes. 17.6% showed an average of serum phosphate levels > 5.5mg/dl, 22.2% found an average of the serum potassium levels >5.5mEq/l. 29.6% of pts had a preHD overhydration measured by bioimpedance with relative overhydration adjusted for extracellular water OH/ECW (>15% Male - >13% Female).

Conclusion

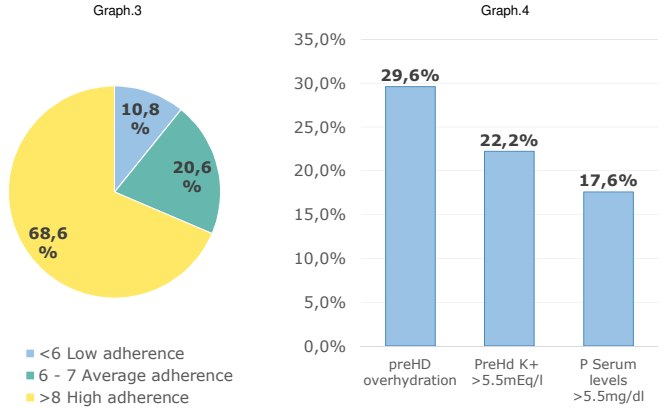
Improving adherence is a global priority for ensuring quality of life and sustainability of care.

This study highlighted that despite the high dialysis performance, nurses working with patients with chronic diseases can play a fundamental role in the patients' motivation making them protagonists of their treatment, in evaluating and promoting adherence to pharmacological and dietary prescriptions.

Picture1: Nurse during patient care



Graph.1: Gender ratio – Graph.2: Mean Kt/V



Graph.3: MMAS-8 Results - Graph.4 : PreHD OH, K+, P serum levels

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