Non-adherence to medical plans in end-stage kidney disease patients

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Patients with end-stage kidney disease (ESKD) undergoing dialysis have highly complex medication regimens, involving careful management of drug therapy, fluid intake and diet. Adherence and persistence to medical plans is recognized as an important problem in dialysis patients, since it has been associated with increased morbidity and mortality, resulting in disproportionately high costs of care. The success of renal replacement therapy depends on patients’ adherence and persistence to the different aspects of the therapeutic strategy, which includes a complex drug regimen involving a wide variety of drugs at different doses, several prescribed dialysis sessions with different durations, dietetic recommendations and restriction of fluid intake. A high variability in the degree of adherence to therapeutic regimens in dialysis patients has been described. Non-adherence to prescribed medication has been found in 15.4% to 50.2% of dialysis patients, while non-adherence to liquid restriction ranges from 9.7% to 49.5% and non-adherence to the recommended diet ranges between 9% and 22.1%. The non-adherence to treatment regimens is associated with poor treatment outcomes, such as bone demineralization, pulmonary oedema and metabolic alterations that favor cardiovascular injury, leading to an increase in the number of hospitalizations and death. Treatment adherence of the ESRD patient under dialysis can be monitored by biological and biochemical markers, namely through dialysis adequacy through urea kinetics level, residual kidney function, and blood pressure control. Furthermore, missing or shortening of the dialysis treatment can be noted by the dialysis staff. These factors together allow for the measurement of patient adherence and outcomes of the dialysis strategy. Medication and dietetic adherence can be correlated to serum potassium and serum phosphate concentrations, blood urea nitrogen and inter-dialytic weight gain, and serum albumin concentration provides a characterization of dietetic status, although several others factors can affect these parameters. However, these biomarkers seem to be more effective and reliable in the evaluation of clinical outcomes than non-adherence. There are currently several self-report scales used to assess patient adherence, but there are a lack of scales that can be used in dialysis patients who require a complex therapeutic regime, including diet and fluid controls. There are several factors that may affect non-adherence in chronic illness patients, particularly in those under dialysis therapy. In this work, a revision of the principal problems associated with non-adherence, as well as its predictors and most important interventions to improve adherence will be performed.

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