The objective is to compare the hospitalization length of stay and costs associated with comorbidities between dialysis patients and non-dialysis patients.

METHODS: This was a cross-sectional observational study (from January to December 2010) of a national hospitalization database from the Brazilian Unified Public Health System (Sistema Único de Saúde – SUS). Patients included in the study were hospitalized due to 3 predefined comorbidities categories: heart disease, vascular disease, and osteometa- bolic diseases, identified using ICD-10 codes. 

RESULTS: A total of 491,644 admissions were observed in patients not on dialysis (control group), while 2,627 admissions were identified in dialysis patients. The comparative analysis of causes of hospitalization showed that a larger proportion of admissions due to heart disease was observed in patients on dialysis (61%) compared to the control group (47.9%), the opposite was observed for vascular and osteometabolic hospitalizations. For all 3 categories, cost of hospitalization for dialysis patients is at least two-fold higher and the length of stay almost 3 times longer (21 days for dialysis patients versus 8 days for non-dialysis) than non-dialysis patients. The greatest differences between these two patient populations are in average costs among dialysis patients hospitalized for osteometabolic disorders versus control group and the highest burden regarding length of hospital stay, due to heart disease. 

CONCLUSIONS: There is a high hospitalization burden among CKD-5D patients in the Brazil health care system. Since inpatient costs were the key cost drivers for CKD, strategies that reduce the risk of hospitalization and increase prevention of comorbidities may substantially decrease the overall healthcare economic burden.

INTRODUCTION AND OBJECTIVES

- A significant proportion of health care resources is expended on the care of patients with chronic kidney disease on dialysis (CKD-5D) and is usually associated with the costs of renal replacement therapy (1-3).
- Due to the high prevalence of risk factors for cardiovascular disease, management of comorbidities may also have a strong impact on cost of CKD care (4).
- Therefore, the objective of the study was to compare the hospitalization rates, length of stay and costs of hospitalization between dialysis patients and a non-dialysis population.

METHODS

- Data from DATASUS (public healthcare system claims database) was collected from January to December 2010 in order to identify and assess hospitalization among dialysis patients. Selected comorbidities considered the most frequent and important in this population were heart disease, vascular disease, and osteometabolic diseases identified using ICD-10 codes (Table 3).
- Data from Datasus (public healthcare system claims database) was collected from January to December 2010 in order to identify and assess hospitalization among dialysis patients. Selected comorbidities considered the most frequent and important in this population were heart disease, vascular disease, and osteometabolic diseases identified using ICD-10 codes (Table 3).

RESULTS

- From the original population, 491,644 admissions were observed in patients not on dialysis, while 2,627 admissions were identified in dialysis patients (Table 2).