

Trends In Cost, Length of Stay, And Mortality in Chronic Kidney Disease Patients On Dialysis Who Present With A Diverticular Bleed

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Background

- Patients with chronic kidney disease (CKD) tend to have higher rates of diverticular bleeds compared to non-CKD patients
- The etiology of these differences includes iatrogenic causes and/or platelet dysfunction.
- The goal of our study is to analyze trends in cost, length of stay (LOS) and mortality in patients with diverticular bleeds who have CKD and are on hemodialysis (HD) to those not on HD.

Methods

- **Study population:**
 - Hospitalized patients with diverticulitis or diverticulosis with hemorrhage and CKD
- **Study period:**
 - 2001 - 2013
- **Data collection:**
 - Data was obtained from the Nationwide Inpatient Sample
- **Exclusion criteria:**
 - Non-hospitalized patients
 - Patients under the age of 18
 - Patients with diverticulitis or diverticulosis who did not have hemorrhage associated and did not have CKD
- **Statistical Analysis:**
 - A one-way analysis of variance was done with linear trend analysis
 - CKD was stratified by based on whether the patient was on dialysis

Results

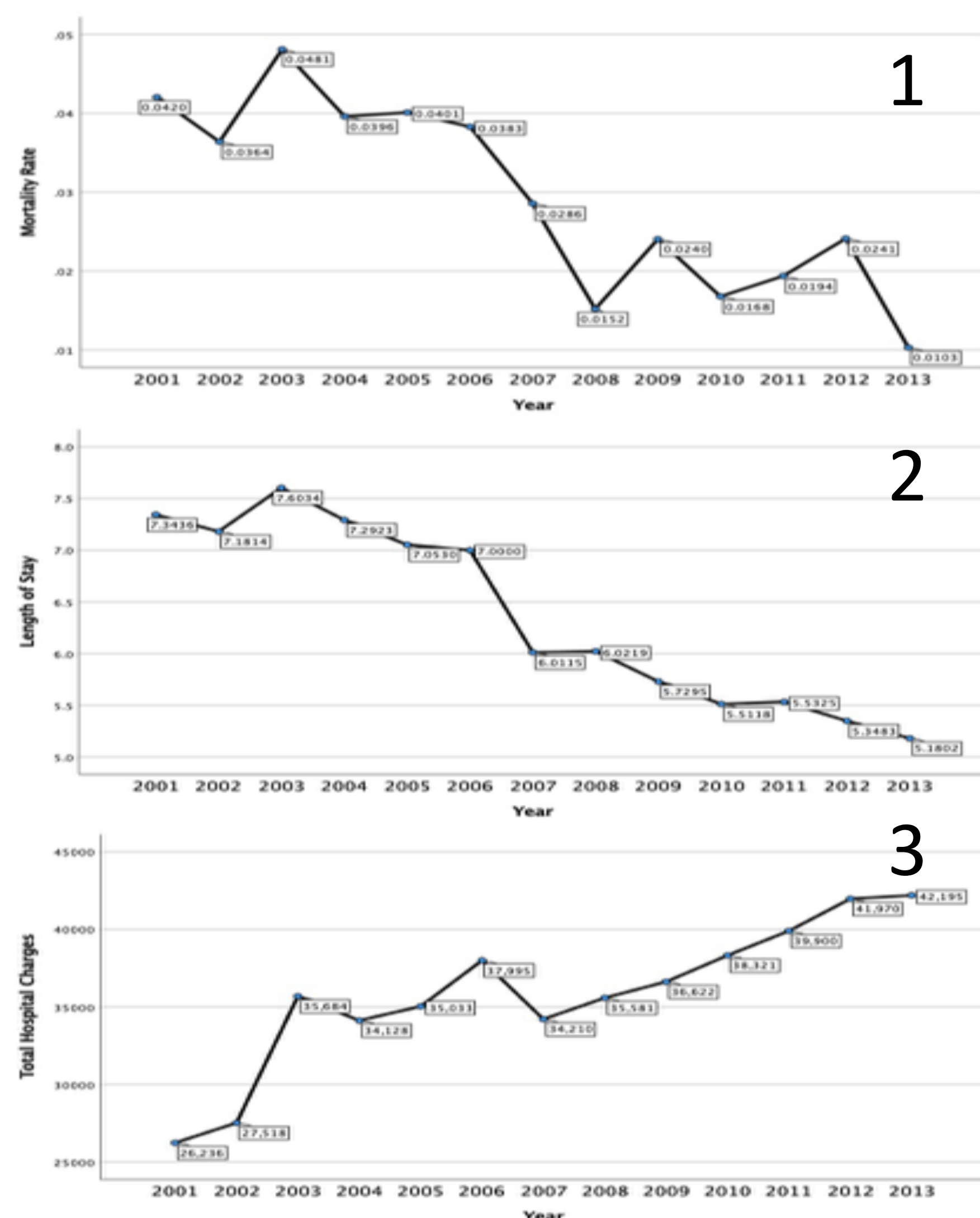


Figure 1-3: 1) Mortality rate of patients on HD presenting with diverticular bleeding vs. year 2) Length of stay of patients on HD presenting with diverticular bleeding vs. year 3) Total Hospital charges of patients on HD presenting with diverticular bleeding vs. year

- Over the time period, mortality and LOS decreased while hospital charges increased for patients with CKD on HD who had a diverticular bleed
- Patients with CKD on HD had a higher mortality rate, higher cost and LOS compared to those with CKD not on HD

Conclusion

- **Key Findings:** LOS, Cost and mortality were all higher in patients with CKD on dialysis who had diverticular bleeds compared to those who were not on dialysis. Mortality and LOS have decreased for these patients over time while cost has increased.
- **Study limitations:** The NIS relies on accurate coding for patient conditions which is difficult to verify. It also only includes inpatients who may be sicker compared to their outpatient counterparts.
- **Future directions:** Advancements in minimally invasive methods to control bleeding may help further decrease mortality and LOS in patients with CKD on HD who have a diverticular bleed.