

## NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

**Submission Id:** 5954

### **Title**

*Overall medication adherence as an indicator for health outcomes among elderly patients with hypertension and diabetes*

### **Priority 1 (Research Category)**

Diabetes and endocrine disease

### **Presenters**

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### **Abstract**

#### Objectives

To assess overall medication adherence as an indicator for emergency room (ER) visits, hospitalizations, and mortality among elderly patients.

#### Methods

The study included individuals aged 75 to 90 years, diagnosed with diabetes or hypertension, who were treated with at least one antihypertensive, or antidiabetic medication in 2017.

We determined personal adherence rates by calculating the mean adherence rates of the medications prescribed to each individual. We retrieved information on all ER visits and hospitalizations in internal medicine and surgical wards from 2017 to 2019 and mortality in 2019.

#### Results

Of the 171,097 individuals included in the study, 60% were women. The mean age was 81.2 years. 93% had hypertension, 46% had diabetes, and 39% had both diabetes and hypertension. In 2017, 61,668 (36.0%) patients visited the ER, 44,910 (26.2%) were hospitalized in internal medicine wards, and 13,305 (7.8%) were hospitalized in surgical wards.

Comparing the highest adherence quintile to the lowest, ORs were 0.69 (0.63, 0.76) for ER visits, 0.40 (0.36, 0.45) for hospitalization in internal wards, and 0.61 (0.52, 0.72) for hospitalization in surgery wards.

ORs were similar for the three consecutive years 2017, 2018, and 2019. The adjusted OR for all-cause mortality in 2019 comparing the highest adherence quintile to the lowest was 0.60 (0.54, 0.66).

## Conclusion

Better medication adherence was associated with fewer ER visits and hospitalizations among elderly patients with diabetes and hypertension and lower mortality rates. Overall medication adherence is a good indicator for health outcomes unrelated to the patient's underlying health status.

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