

POSTER ABSTRACTS

11th Annual HMO Research Network Conference

April 4-6, 2005 Santa Fe, NM

Chronic Disease 20

Patient Characteristics and Adherence to Angiotensin Drugs: In Search of a Magic Bullet...

Jie Huang, Kathy Brody, Richard Brand, John Hsu

Background: Despite evidence demonstrating the clinical benefit of angiotensin converting enzyme inhibitors and angiotensin receptor blockers (angiotensin drugs), there is limited data on levels of drug adherence in everyday clinical practice and potential explanations for low adherence.

Methods: We used logistic regression to examine the association between five categories of patient characteristics and low adherence to angiotensin drugs in 2003. The five categories were demographics (age, gender, race/ethnicity, marital status, and living arrangement), socioeconomic characteristics (poverty, low education, English language proficiency, and having a drug benefit cap), health status (self-reported health, depression, and functional status), health behavior (receiving a flu or pneumonia shot, and smoking) and physiological status (serum creatinine level). We defined low adherence as having adequate drug supply for less than 80% of days in 2003. All subjects were members in a large, prepaid integrated delivery system who were 65+ years old, received angiotensin drugs in the prior year (2002), and completed the Medicare Health Status Questionnaire between 1999-2002 (upon entering the Medicare program).

Results: Of the 14,663 subjects receiving angiotensin drugs in 2002, 32.3% were not adherent in 2003. The mean age of all subjects was 75.3 years (SD=6.9); 57.9% were female; 74.1% were white; 13.9% received Supplemental Security Income or lived in subsidized housing; 10.3% did not report English as a primary language; 15.6% did not receive a flu or pneumonia shot; 6.4% had depression; 18.8% had limitations in Instrumental Activity of Daily Living (IADL) and 3.02% had creatinine levels ≥ 2 mg/dl. In the multivariate models, all five categories of characteristics were associated with low adherence. For example, older age, non-white ethnicity, having a drug benefit cap, poor health behavior, poor self-reported health status, depression, IADL limitations, and elevated creatinine levels were all associated with low adherence after adjusting for other characteristics.

Conclusion: In this study, one in three Medicare patients receiving angiotensin drug therapy were not adherent. These preliminary results suggest that multiple factors appear to be associated with low adherence. Further research is needed to better understand the root causes for poor adherence, which might serve as a foundation for developing effective interventions.