

Department of Pharmacoepidemiology & Pharmacotherapy,  
Utrecht University, Utrecht, The Netherlands

**OBJECTIVE:** The aim of this study was to estimate the proportion of strokes occurring among hypertensive patients in The Netherlands attributable to under-treatment of hypertension.

**METHODS:** The baseline data reported in this study were collected in two population-based studies. Approximately 45,000 men and women aged 20 years and over were examined in these studies. In all participants, blood pressure, serum lipid levels, weight, and height were measured, and all respondents completed a questionnaire on cardiovascular risk factors and current use of medication. For the classification of under-treatment, the Dutch guidelines for management of hypertension were used (pharmacological treatment when diastolic blood pressure [DBP] is between 100 and 105 mmHg and one or more cardiovascular risk factors are present, or when the systolic blood pressure [SBP] is between 160 and 180 mmHg and one or more cardiovascular risk factors are present, or when DBP > 105 mmHg, or when SBP > 180 mmHg; treatment goal is a DBP < 90 mmHg and a SBP < 160 mmHg). Information on fatal and non-fatal strokes during follow-up were obtained through patient records from general practitioners.

**RESULTS:** Of the subjects, 3168 were hypertensive. Subjects who were not in need of pharmacological treatment according to the guidelines and subjects with missing data were excluded. Follow-up was complete for 2369 (91%) of the 2616 remaining subjects. Mean duration of follow-up was 4.6 years. Compared to treated and controlled hypertension, the adjusted relative risks of stroke were 1.30 [95% CI 0.70–2.44] and 1.76 [95% CI 1.05–2.94] for treated and uncontrolled hypertension, and untreated hypertension that should be treated, respectively. Among hypertensives the proportion of strokes attributable to under-treatment of hypertension was about 28%. **CONCLUSION:** Improvement of control of hypertension among treated hypertensives, detection of hypertension, and adherence to the current guidelines on the management of hypertension might prevent a considerable proportion of the incident strokes among hypertensives.

**CD4**

#### **LEFT VENTRICULAR SYSTOLIC FUNCTION AND 90-DAY HOSPITAL READMISSION IN CONGESTIVE HEART FAILURE PATIENTS: IMPLICATIONS FOR DISEASE MANAGEMENT**

Wang AY<sup>1</sup>, Thomas J<sup>1</sup>, Schiff GD<sup>2</sup>, Stamos TD<sup>3</sup>, Weiss KB<sup>3</sup>

<sup>1</sup>Pharmacy School, Purdue University, Northbrook, IL, USA;

<sup>2</sup>The Cook County Hospital, Chicago, IL, USA; <sup>3</sup>Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, USA

The long-term prognostic influence of left ventricular systolic function (LVERSUSF) in diagnosing patients with congestive heart failure (CHF) has been widely documented.

However, the short-term prognostic significance of LVERSUSF on early hospital readmission for CHF is limited.

**OBJECTIVES:** The study purpose was to examine the influence of LVERSUSF on 90-day readmission for CHF.

**METHODS:** Medical records were reviewed for all patients with a principle diagnosis of CHF discharged alive from January 1 through June 30, 1997 at an urban public hospital. LVERSUSF assessments within 6 months prior to discharge were used to classify patients as normal LVERSUSF or left-ventricular (LV) systolic dysfunction.

**RESULTS:** Among 387 patients, 303 (78.3%) had 6-month assessments of LVERSUSF. Among patients with LVERSUSF assessments, 207 patients (68.3%) had LV systolic dysfunction and 96 patients (31.7%) had normal LV systolic function. A total of 54 (26.1%) of the 207 patients with LV systolic dysfunction were readmitted for CHF within 90 days, versus 13 (13.5%) of the 96 patients with normal LVERSUSF that were readmitted ( $p < 0.01$ ). Multivariate logistic regression analysis (including: age, gender, prior history of CHF, comorbidities, NYHA class, medication adherence) showed 90-day readmission for CHF was more likely in patients with LV systolic dysfunction than in those with normal LVERSUSF after adjusting for other identified risk factors ( $p = 0.05$ ).

**CONCLUSIONS:** LV systolic dysfunction appears to increase the likelihood of 90-day readmission among patients with CHF. The findings underscore the ability of LVERSUSF to stratify patients hospitalized for CHF and suggest potential usefulness in aiding management by identifying higher risk patients.

#### **ECONOMIC AND OUTCOMES ISSUES IN MENTAL HEALTH**

**NDI**

#### **INPATIENT COST AND RESOURCE UTILIZATION FOR PARKINSON'S DISEASE**

Doshi DP, Chatterton ML

Thomas Jefferson University, Philadelphia, PA, USA

**OBJECTIVE:** To determine inpatient resource use, cost, and major cost drivers for idiopathic Parkinson's disease (PD).

**METHODS:** A retrospective study, evaluating patients admitted at a large academic medical center between July 1994 and June 1997 with a primary or secondary diagnosis of PD. Average length of stay (ALOS), resource use, institutional cost (including overhead), demographics, and admission severity information was extracted from the inpatient cost accounting system. Resources and costs were then grouped into categories based on type of service provided.

**RESULTS:** Sixteen patients with primary diagnosis (PDX) and 378 patients with secondary diagnosis (SDX) of PD were identified. Of the 378 SDX patients, only 54 patients were assumed to have a PD-related primary diagnosis and were included in the analysis. Although the PDX group had higher admission severity scores than the