Weekend Versus Weekday Admission and Stroke Outcome in Sweden From 1968 to 2005

To the Editor:

We read with great interest the article by Saposnik et al.1 The authors analyzed data from stroke patients admitted to Canadian acute care hospitals between April 1, 2003, and March 31, 2004, and concluded that stroke patients admitted on weekends had a higher mortality than did patients admitted on weekdays. To shed further light on this issue we here present data from the Swedish Hospital Discharge Register2,3 concerning stroke hospitalization and mortality. We examined data from the following time periods: 1968 to 1979, 1980 to 1989, 1990 to 1999, and 2000 to 2005. We had 6048/23,323, 15,287/52,226, 39,033/122,924, 27,179/81,390 patients hospitalized with their first ischemic stroke in these time periods admitted on weekends/weekdays, respectively. Referrals from other hospitals and transient ischemic attacks were excluded. Swedish data confirm that patients admitted on weekends are less likely to be discharged to the same place of residence. The age and sex adjusted odds ratio for discharge back to place of residence was 0.898 (95% CI, 0.832 to 0.969), 0.960 (95% CI, 0.915 to 1.008), 0.906 (95% CI, 0.879 to 0.934), and 0.961 (95% CI, 0.928 to 0.995) for the corresponding time periods. We also confirmed the excess mortality on weekends when compared with weekdays. Notably, the excess mortality showed a decreasing trend over time. The age- and sex-adjusted odds ratio for 7-day mortality was 1.255 (95% CI, 1.145 to 1.374), 1.160 (95% CI, 1.084 to 1.242), 1.142 (95% CI, 1.088 to 1.198) and 1.072 (95% CI, 1.009 to 1.140) for the corresponding time periods. When examining hemorrhagic stroke, which was excluded from the analyses by Saposnik et al.1 we got essentially similar results: patients admitted on weekends were less likely to be discharged to the same place of residence, and we also observed an excess mortality on weekends especially in earlier time periods.

Disclosures

None.

Imre Janszky, MD, PhD
Staffan Ahnve, MD, PhD
Department of Public Health Sciences
Karolinska Institute
Stockholm, Sweden

Rickard Ljung, MD, MPH, PhD
The National Board of Health and Welfare
Department of Public Health Sciences
Karolinska Institute
Stockholm, Sweden

Weekend Versus Weekday Admission and Stroke Outcome in Sweden From 1968 to 2005

Imre Janszky, Staffan Ahnve and Rickard Ljung

Stroke. 2007;38:e94; originally published online July 26, 2007;
doi: 10.1161/STRKEAHA.107.491449
Stroke is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2007 American Heart Association, Inc. All rights reserved.
Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://stroke.ahajournals.org/content/38/9/e94