

'July effect' does not impact stroke outcomes, according to new study

December 23 2014



"We found there was no higher rate of deaths after 30 or 90 days, no poorer greater rates of disability or loss of independence and no evidence of a July effect for stroke patients," said Dr. Gustavo Saposnik, director of the Stroke



Research Centre of St. Michael's Hospital. Credit: St. Michael's Hospital

Patients with strokes caused by blood clots -known as acute ischemic strokes- who were admitted in July had similar outcomes compared to patients admitted any other month, according to a new study. The findings challenge concerns about the possibility of lower quality of care and the potential risk of poorer outcomes in teaching hospitals when new medical residents start each July - sometimes called the "July effect."

The possibility of a July effect is more relevant and concerning for timesensitive conditions, such as stroke, since urgency and expert management is required for treatment. Teaching hospitals treat more than half of strokes, a leading cause of death and disability worldwide, but little research has been done to verify whether there is a July effect in stroke care and patient outcomes at <u>teaching hospitals</u>.

"We found there was no higher rate of deaths after 30 or 90 days, no poorer greater rates of disability or loss of independence and no evidence of a July effect for <u>stroke patients</u>," said Dr. Gustavo Saposnik, director of the Stroke Research Centre of St. Michael's Hospital and a scientist with the Institute for Clinical Evaluative Sciences.

The multidisciplinary nature of specialized stroke care may compensate for the lack of experience among trainees.

"Stroke teams, which usually include an emergency physician's initial assessment, a neurologist, neuroradiologist, physiotherapists, occupational therapist, nurse and dietitian so the addition of new personnel may have less of an effect with strokes compared to other health issues," said Dr. Saposnik, who is also a scientist with the Li Ka Shing Knowledge Institute of St. Michael's and lead author of the study.



Another possible explanation for the lack of a discernible July effect in stroke outcomes is that the impact of care is greatest immediately following a stroke and might not be noticeable at the end of a hospital stay.

"Thirty days after a stroke, any July effect may have already leveled off," said Dr. Saposnik. "More research is needed to understand the possible impact of less-experienced care during the initial moments of stroke management to be sure no July effect is at play at any point of <u>stroke care</u>."

For the study, published today in the *Journal of Stroke and Cerebrovascular Diseases*, researchers looked at 10,319 patients with acute ischemic strokes between July 1, 2003, and March 31, 2008.

Other researchers have looked at the July effect on several other conditions, such as cardiac surgery, orthopedic surgery, intensive care, neonatology with low birth weight and pediatric brain tumours, and showed four to 12 per cent higher rates of mortality in July.

"Interestingly, we found that <u>ischemic stroke</u> patients admitted in July were less likely to receive clot-busting drugs or be admitted to stroke units, but ultimately patients did just as well regardless of the month," said Dr. Saposnik.

The research team also looked at referrals to long-term care facilities at time of discharge from hospital, length of hospital stay, hospital readmissions or ED visits for any reason within 30 days from discharge from hospital and <u>hospital</u> readmission within 30 days from discharge due to <u>stroke</u>.

Provided by St. Michael's Hospital



Citation: 'July effect' does not impact stroke outcomes, according to new study (2014, December 23) retrieved 1 May 2024 from <u>https://medicalxpress.com/news/2014-12-july-effect-impact-outcomes.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.