

## Optimism reduces stroke severity, inflammation

February 12 2020



Credit: CC0 Public Domain

Stroke survivors with high levels of optimism had lower inflammation levels, reduced stroke severity and less physical disability after three months, compared to those who are less optimistic, according to



preliminary research presented at the Nursing Symposium of the American Stroke Association's International Stroke Conference 2020—Feb. 18-21 in Los Angeles. The conference is a world premier meeting for researchers and clinicians dedicated to the science of stroke and brain health.

In a small study of 49 <u>stroke survivors</u>, researchers examined the relationship among optimism, inflammation, stroke severity and physical disability for three months after a stroke. Researchers said that understanding how these elements relate to or impact one another may provide a scientific framework to develop new strategies for stroke recovery.

"Our results suggest that optimistic people have a better disease outcome, thus boosting morale may be an ideal way to improve mental health and recovery after a stroke," said Yun-Ju Lai, Ph.D., M.S., R.N., the study's first author and a postdoctoral fellow in the neurology department at The University of Texas Health Science Center at Houston.

Post-stroke inflammation is detrimental to the brain and impairs recovery. Optimism has been associated with lower inflammation levels and improved health outcomes among people with medical conditions, however, no prior studies assessed if this association exists among <u>stroke patients</u>.

This pilot study is a secondary analysis of data collected from a repository of neurological diseases. Outcomes included optimism levels from the revised Life Orientation Test, a standard psychological tool for measuring optimism; stroke severity evaluation through the National Institutes of Health Stroke Scale, and levels of inflammatory markers—interleukin-6 (IL-6), <u>tumor necrosis factor alpha</u> (TNF $\alpha$ ) and C-reactive protein (CRP).



As optimism levels increased, stroke severity and the inflammatory markers IL-6 and CRP decreased even after considering other possible variables. However, this was not true of TNF $\alpha$ .

"Patients and their families should know the importance of a positive environment that could benefit the patient," Lai said. "Mental health does affect recovery after a stroke."

## Provided by American Heart Association

Citation: Optimism reduces stroke severity, inflammation (2020, February 12) retrieved 26 April 2024 from <a href="https://medicalxpress.com/news/2020-02-optimism-severity-inflammation.html">https://medicalxpress.com/news/2020-02-optimism-severity-inflammation.html</a>

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.