

Innovative Practice Award Application

Name: Erica Sigman, DPT, OCS

APTA#: 438873

Email: esigman@usc.edu

Practice setting: Outpatient faculty based physical therapy practice

Innovation: The Chronic Headache Self-Efficacy Scale (CHASE)

Practice Innovation Description

Physical therapists at USC Physical therapy work with the Keck Headache and Neuralgia center to manage patients with various chronic headache disorders. Clinical observations lead us to recognize that patients with good outcomes, seemed to have superior self-efficacy when it comes to coping with and managing their headache related symptoms and triggers. The two self-reported outcome measures previously being used were the Headache self-efficacy scale (HSES) and the Headache management self-efficacy scale (HMSE). Neither scale is able to address the impact headaches on physical function, ability to perform social activities, or emotional impact of headache, thus they are not optimal in capturing all dimensions that can affect a patient's quality of life. Our scale is innovative in that it seeks to fill this gap to help assist in reducing headache-related disability by helping to guide treatment decisions which is impactful to the overall healthcare system as headache related disability is associated with high healthcare cost.

We utilized input from a multidisciplinary team, which includes physical therapist input (not previously captured in the above scales), as well as patients diagnosed with chronic headache disorders to develop a 14-item self-efficacy scale. We then conducted a psychometric evaluation of the scale in a longitudinal observational study and found our scale to have moderate day-to-day reliability (similar to the Headache Impact Test – HIT-6; which is widely used in headache literature and clinical management). The CHASE was also found to demonstrate convergent validity with other measures related to chronic headache and was found to correlated with HIT-6, HMSE and SF-12.

The result of our work provides healthcare providers treating patients with chronic headache disorders another way to measure treatment plan success through patients' sense of self-efficacy. This scale has been recently published by the Headache Journal and is open access so it comes to no cost or training for any provider seeking to use this scale. The ultimate goal is to have this scale widely used to help guide treatment for patients with chronic headache. Given that the CHASE has items such as "performing physical activity without triggering a headache," "managing headache by adjusting body position," "perform computer work without increasing headache," etc, this scale directly highlights the need for physical therapy in the overall treatment plan for these patients. Our next step would be to validate this scale in the post-concussion patient population and funding would help push this along. Funding could also help in our ability to present this scale at various national and international headache and neurology conferences to promote its use

thus highlighting the need for physical therapy as a part of the treatment plan for these patients. Thank you for your consideration.

Here is a link to the published manuscript:

<https://headachejournal.onlinelibrary.wiley.com/doi/10.1111/head.14888>