

## Neuroprotective effects of exercise for multiple sclerosis warrant thorough investigation-Ep43 Listen to the podcast

JOAN BANKS-SMITH 00:04

I'm your host, Joan Bank Smith, and this is Kessler Foundation's Fast Takes, research that changes lives. In this episode, Dr. Brian Sandroff, senior research scientist in our Center for Neuropsychology and Neuroscience Research, talks about his peer-reviewed article, Exercise Training and Multiple Sclerosis, published in April 2022 in a journal, The Lancet Neurology. Dr. Sandroff, can you share with us the main takeaways of this study?

BRIAN SANDROFF 00:34 This commentary highlights several different meta-analyses and systematic reviews that have been published within the last couple of months that generates sweeping conclusions based on a small but growing number of rather poorly designed randomized controlled trials. And this wasn't a research study per se, but more of a commentary. And we wanted to publish this quickly, considering that the poorly designed trials are being published at an increasing rate and are at risk of becoming the status quo. And the commentary itself was aimed to inspire a paradigm shift as soon as possible, as the commentary articulates that the field won't advance with studies that are poorly designed for appropriately evaluating the impact of exercise on neuroplasticity and neuroprotection, in particular, in persons with MS.

BANKS-SMITH 01:23

What is the impact and next implications of this publication to the field?

SANDROFF 01:27

Our hope is that this will help the next crop of research studies to make better evaluations in exercise as a possible neuroplasticity or neuroprotection-inducing behavior. And that involves things from choosing the appropriate duration of exercise, making stronger hypotheses as to why exercise might impact the brain in people with MS, as well as not relying so heavily on whole-brain MRI metrics, and really focusing on regions of interest that would be hypothesized to change in response to exercise, and perhaps more importantly, choosing the appropriate sample that would be targeted for having damage to the central nervous system so that exercise might make a larger impact in people with MS, and we can learn more and make a larger impact on clinical practice and patients themselves.

BANKS-SMITH 02:32

Learn more about Dr. Sandroff, the Center for Neuropsychology and Neuroscience Research, and his peer-reviewed article in the program notes. Tuned into our podcast series lately? Join our listeners in 90 countries who enjoy learning about the work of Kessler Foundation. Be sure and subscribe to our SoundCloud channel, Kessler Foundation, for our research updates. Follow us on Facebook, Twitter, and Instagram. Listen to us on Apple Podcasts, Spotify, SoundCloud, or wherever you get your podcasts. This podcast was recorded remotely on May 4, 2022, and was edited and produced by Joan Bank Smith, creative producer for Kessler Foundation.