KESSLER FOUNDATION Podcast Transcript

Dr. Nancy Chiaravalloti talks about the role of language ability in verbal fluency of individuals with MS - Episode 25

*** Recorded on April 21, 2021. *** Listen to it here.

JOAN BANKS-SMITH: 00:00

[music] In this episode, I spoke with Dr. Nancy Chiaravalloti, director of the Centers for Neuropsychology, Neuroscience, and Traumatic Brain Injury Research at Kessler Foundation. Dr. Chiaravalloti shared important findings from her peer-reviewed article "The Role of Language Ability and Verbal Fluency of Individuals with Multiple Sclerosis," which was published in February 2021 in the journal Multiple Sclerosis and Related Disorders. This research upends long-held assumptions that language ability is largely intact in individuals with multiple sclerosis, suggesting the need for more comprehensive neuropsychological testing. Dr. Chiaravalloti, can you share with us the main takeaways of this study?

NANCY CHIARAVALLOTI: 00:54

In MS, there are several cognitive deficits, but largely it is believed that language ability is intact. Fluency is a very common measure that's given in many neuropsychological assessments to many populations. It's often given in MS. There are two types of fluency. One is letter and one is category, and any deficits that neuropsychologists have seen on fluency in an MS population have been largely thought to be due to speed of processing deficits. Speed of processing deficits are the single largest cognitive deficit in MS. [What we?] looked at, however, was the contribution of different cognitive factors to verbal fluency, and those different factors included language ability, speed-- oral motor speed, processing speed, as well as executive functions. So it was interesting because we found that vocabulary and processing speed both predicted letter fluency, while only vocabulary predicted category fluency. Those are the two types of fluency that we test; one is letter and one is category. So these findings suggest that the verbal fluency deficits in MS may reflect not only processing speed impairment, but also impaired language ability.

BANKS-SMITH: 02:12

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

CHIARAVALLOTI: 02:17

This type of publication is very important to the field because in order to help patients improve their cognition, we need to have a solid understanding of what aspects of cognition need to be improved. In the past, we have not really focused much on language because in most patients, language was deemed to be okay. But what this study shows us is that language really needs further research. We need to look further into language ability in MS, and clinical evaluations really need to include a full evaluation of language ability in case that is a deficit people are experiencing [music] that needs intervention.

BANKS-SMITH: 03:00

Funding source for this study was the National Institute of Health. To learn more about Dr. Chiaravalloti, the Center for Neuropsychology and Neuroscience, and the Center for Traumatic Brain Injury Research, links can be found in the program notes. Tuned in to our podcast series lately? Join our listeners in 90 countries who enjoy learning about the work of Kessler Foundation. Follow us on Facebook, Twitter, and Instagram; listen to us on Apple Podcast, Spotify, SoundCloud, or wherever you get your podcasts. This podcast was recorded on Wednesday, April 21, 2021, remotely, and it was edited and produced by Joan Banks-Smith, creative producer for Kessler Foundation.