**Transcript Details**
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/neurofrontiers/exploring-the-latest-in-ms-cognitive-rehabilitation-strategies/18041/

**ReachMD**
www.reachmd.com
info@reachmd.com
(866) 423-7849

Exploring the Latest in MS Cognitive Rehabilitation Strategies

**Announcer:**
You're listening to *NeuroFrontiers* on ReachMD. On this episode, we'll hear from Dr. Nancy Chiaravalloti, who's the Director of the Center for Neuropsychology and Neuroscience Research and the Center for Traumatic Brain Injury Research at Kessler Foundation. Today, she'll be discussing cognitive rehabilitation trials for multiple sclerosis, which was the topic of her session from the ACTRIMS 2024 Forum.

Let's hear from her now.

**Dr. Chiaravalloti:**
So cognitive rehabilitation has really only started to be used in persons with multiple sclerosis about 20 to 25 years ago. That's when it really started transitioning from predominantly individuals with traumatic brain injury into other patient populations including multiple sclerosis. And over that period of time, the number of studies that have examined the efficacy of cognitive rehabilitation in MS has grown substantially with several studies being run in the last decade. So I'm going to be breaking the cognitive rehabilitation protocols down by domain. So there are protocols that address attention, working memory, and processing speed. I'll be talking about those in one section of the presentation. And then there are other protocols that address learning and memory, and I'll be talking about those in a separate section. Within each of those sessions, I'm going to focus on the class one evidence within attention processing speed and executive functioning. The protocols that I'll be presenting on will include RehaCom, which is a protocol that was developed in Europe and has gained a great deal of popularity in Europe and is now being used a little bit more in the United States and has a great deal of evidence base across processing speed, as well as executive functioning. I will also be talking about attention process training and the evidence base that has been built in MS supporting attention TR processing training for treating attention deficits in multiple sclerosis.

And then I'll also be talking in that domain about speed of processing training and Brain HQ and speed of processing training, which is currently being used in multiple sclerosis, and the evidence has also been building, supporting the efficacy of Brain HQ, and speed of processing training to treat processing speed deficits in individuals with MS. So that's in the attention processing speed executive functioning domain. But then I'm going to move into the learning and memory domain and talk about the Kessler Foundation modified story memory technique, which has been investigated at Kessler over the past 20 years or so, starting in MS with studies looking at neuropsych data, imaging data, as well as individuals with relapsing remitting MS, as well as individuals with primary progressive and secondary progressive MS showing efficacy across all those domains.

I'll be talking a little bit about several unmet needs. First, it's important that we identify more effective treatment protocols for addressing these problems in persons with MS. And the reason for that is one treatment protocol doesn't apply to all cognitively taxing situations that people might have trouble with. So the more treatment protocols that we identify as effective, the better off we are. In addition to

that, there are a number of questions that remain unanswered. So one question is what's the dosage, how many treatment sessions does someone need in order to show the best effect? Another question is at what point in the disease process should we be providing this treatment?

So as an example, the aging literature is showing that people who are still healthy are showing some substantial benefits from cognitive enhancing techniques that stave off cognitive decline and delay that dementia process. So should we be treating people with MS when they're first diagnosed and giving them these strategies so that when the cognitive impairment begins to unfold, they have a stronger cognitive base from which to be able to maintain intact cognitive functions? Another gap is in the various languages in which all of these cognitive rehabilitation protocols can be delivered. Very often they're delivered in one, two, maybe three languages at most, but there are people with MS all around the world. So we really need to enable translation and cultural adaptation of these research protocols. So those are all really important gaps that remain, that research should be addressing.

**Announcer:**
That was Dr. Nancy Chiaravalloti discussing cognitive rehabilitation in MS. To access this episode and others in our series, visit *NeuroFrontiers* on ReachMD dot com, where you can Be Part of the Knowledge. Thanks for listening!