

Determinants of unemployment in multiple sclerosis (MS): The role of disease, person-specific factors, and engagement in positive health-related Behaviors

*** Recorded on October 8, 2020. *** [Listen to it here.](#)

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JOAN BANKS-SMITH:
00:04

This is Joan Banks-Smith for Kessler Foundation's fast takes, research that changes lives. Today, I'm with Dr. Lauren Strober, a senior research scientist in the Center for Neuropsychology and Neuroscience at Kessler Foundation, to talk to her about her latest peer-reviewed article, Determinants of Unemployment in Multiple Sclerosis: The Role of Disease, Person-Specific Factors, and Engagement in Positive Health-Related Behaviors. This was published on September 3rd, 2020, in the journal Multiple Sclerosis and Related Disorders. The funding source for this study is the National Institute of Health. Dr. Strober, can you share with us the main takeaways of this study?

LAUREN STROBER:
00:45

There are several takeaway points from this study. For one, this was the first prospective study examining the disease, person-specific factors, and lifestyle behaviors associated with unemployment in multiple sclerosis. So we specifically examine these factors in association with an individual's feeling as if they felt they were at risk for leaving the workforce. This is very unique. To date, the majorities of studies that have examined the factors associated with unemployment in MS have been primarily retrospective. So given what we know about unemployment in general, there is a host of physical and mental-health consequences that then make it difficult to discern for what's actually an artifact of being unemployed or an actual antecedent for why people felt they needed to leave the workforce. So for example, things such as depression or sleep difficulties, fatigue, they're all common following becoming unemployed, but we also know these also contribute to why people say they leave work. This study is also unique in that the majorities of studies have focused on factors such as demographics, so things like gender or age, disease symptoms but mostly fatigue and cognitive problems, and they pay some attention to psychological function or the person. There's a [constant?] of depression or anxiety contributing to unemployment. But we sought to look at more person-specific factors, things such as self-efficacy and one's coping style and personality and, even more uniquely, their engagement in healthy lifestyle activities because we think these could be real drivers as to how individuals contend with and live with their MS and can ultimately also affect if they stay employed. We looked at this, and again, reason being that the majority of individuals leave early on in the illness. It's important to capture the processes as they're going on in the moment to see if there's ways to intervene before it's too late.

STROBER: 02:40

We enrolled 252 individuals. Of these, 67 or about 27% expressed feeling as if they might need to leave the workforce or cut back their hours, due to their MS, in the imminent future. And then, to better discern what may account for this, we compared these individuals to the remaining 185 who weren't reporting any difficulties at work due to their MS. And what we found were that the differences between the groups, it was not on age or gender or education or disease duration,

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such as have been previously shown, but that folks at risk were more likely to have a progressive disease course. They reported greater fatigue, sleep problems, and pain. They also endorsed higher rates of depression and anxiety. And again, this is all consistent with previous findings. What was really interesting is that in contrast, those not at risk reported greater levels of locus of control, self-efficacy in managing their MS, engagement in more adaptive coping with regard to personality and lifestyle, which, again, not commonly studied. We found that those at risk endorsed greater levels of neuroticism and lower levels of things such as conscientiousness or extraversion and agreeableness, which is all sort of indicative of a more distressed personality and, we know, is associated with poorer health outcomes and functional outcomes. And in fact, these individuals reported also engaging in less healthy lifestyle factors such as diet and exercise. When we look at this altogether, what was really interesting is that the most important predictors were consistent with other findings having a progressive course and higher levels of fatigue. But also in the unique finding is that they also were not engaging in healthy lifestyle factors, such as diet and exercise, and this has never been shown before. So it's probably the largest takeaway from the study.

BANKS-SMITH: 04:21

What is the impact and next implications of the study to the field?

STROBER: 04:24

This study really highlights the need for assessment of these factors when understanding who's at risk for leaving work and also the importance on assessing individuals earlier than later, before it's too late and individuals have already left the workforce. And the fact that diet and exercise, for one, was a significant predictor, when taking into account all the other factors, suggests that intervention aimed at improving these lifestyle factors may actually assist in better management of one's symptoms. It could be associated with greater self-efficacy in managing one's illness, and, ultimately, that may in turn help people stay employed, which is the overarching goal of this project. We want to help people stay in the workforce, knowing how important employment is to health, one's sense of purpose and meaning, and their overall well-being.

BANKS-SMITH: 05:09

For more information about this study, check out the press release on our website, kesslerfoundation.org, or at the journal Multiple Sclerosis and Related Disorders. Links can be found in the program notes. Listen to us on iTunes, SoundCloud, Spotify, or wherever you get your podcasts. [music]