

SUMMER 2023



Quality employment outcomes throughout the work lifecycle: Application to persons with spinal cord injury, multiple sclerosis, and stroke Study



“Unemployed individuals with SCI were more likely to report that the jobs for which they were trained were not accessible.”

Health, Employment and Longevity Project Employment (SCI, MS and Stroke) Study NEWS & UPDATES

Research Highlight

Barriers and facilitators to Employment: A Comparison of Participants with Multiple Sclerosis and Spinal Cord Injury

Introduction

Individuals with spinal cord injury (SCI) experience a high rate of accessing health care, including hospitalization and emergency department (ED) visits. Our objective is to compare self-reported barriers (things get in your way) and facilitators (things that help you) to employment among employed and unemployed participants with multiple sclerosis (MS) and spinal cord injury (SCI).

Key Findings

- Overall, the MS participants reported more barriers, particularly stress, cognitive issues, and fatigue, whereas those with SCI were more likely to report not having the proper education and training, resources, transportation, and attendant care issues.
- Among those employed, participants with SCI were more likely to report they could not do the same types of jobs as they could pre-SCI and those with MS were more likely to state that they did not know much about jobs for people with disabilities.
- Unemployed individuals with SCI were more likely to report that the jobs for which they were trained were not accessible.

Conclusion

Individuals with MS identified more barriers to employment, many of which related to the symptoms or complications of MS, stress management, nonwork considerations, and limited knowledge of options after disability. Participants with SCI were much more likely to identify modifiable barriers related to education and training, resources, and needs for assistance, such as attendant care and transportation.

Longitudinal research is needed to identify the changes in barriers and facilitators, and to assess if these changes are followed by an associated change in future employment outcomes. It is important to develop and test interventions that are directed at the most modifiable barriers to employment for each group. It is also important to investigate how differences in vocational rehabilitation services affect employment barriers and employment outcomes of individuals with both SCI and MS.

The contents of this research brief were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) grants 90DPEM0006, 90DP0050, and 90DP0098. The contents do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.



“We have enrolled 46 Participants - 16 SCI, 15 MS, 19 Stroke - who participated in our 7 focus group meetings ”

Study Updates

Study Update:
Quality employment outcomes throughout the work lifecycle: Application to persons with spinal cord injury, multiple sclerosis, and stroke

We will conduct and translate qualitative, cross-sectional, and longitudinal research into tools to promote quality employment outcomes for people with disability secondary to spinal cord injury (SCI), multiple sclerosis (MS), and stroke.

Our goal is to identify modifiable barriers and facilitators that may be targets of policy change, leading to improved quality employment outcomes, including, but not limited to earnings, benefits, promotions, and job satisfaction. The three study objectives are: (1) use *quali-*

tative methods to identify the primary barriers to employment, including the impact of COVID-19, (2) develop *econometric models* to quantify employment outcomes between diagnostic groups, and (3) develop *longitudinal models* linking barriers and facilitators with quality measures of employment.

We have collected the qualitative data for this study by hosting 7 in-person or virtual focus group meetings. A total of 46 participants (16 SCI, 15 MS, 19 Stroke) participated in these meetings.

We have transcribed the meeting content and are in the process of analyzing the data for the development of manuscripts and new content for our upcoming self-report assessment data collection.

May is Stroke Awareness Month

May is National Stroke Awareness Month is observed in the United States every year and aims to create public awareness about stroke risk factors and to lessen the occurrence of stroke in the U.S.



Heart Awareness walks are being organized all over the country.

Check out more at:
[Heart Walk near you](#)

“it’s important to know that stroke is 80% preventable”

Recent Publications

The following manuscripts were recently accepted to be published in upcoming issues of *Topics in Spinal Cord Injury Rehabilitation* and *Archives of Physical Medicine and Rehabilitation*.

- Cao, Y., DiPiro, N.D., & Krause, J.S. (in press). Longitudinal changes in employment, health, participation, and quality-of-life and the relationships with long-term survival after spinal cord injury. *Spinal Cord*.

- Krause, J.S., Dismuke-Greer, C.E., & Reed, K. (in press). Expectation of Future Engagement in Employment: Findings among Participants with Spinal Cord Injury. *Rehab Couns Bull*.

- Krause, J.S., Dismuke-Greer, C.E., Reed, K., & Jarnecke, M. (in press). Characteristics associated with perceived underemployment among participants with spinal cord injury. *ARRCT*.

SUMMER 2023



Risk of opioid use disorder and related consequences: A longitudinal study of spinal cord injury Study



“Cannabis was the most frequently reported psychoactive substances (16.4%) followed by sedatives or sleeping pills (8.0%)”

Longevity After Injury Project Opioid Study NEWS & UPDATES

Research Highlight

Psychoactive Substance Use Among Individuals with Chronic Spinal Cord Injury *Patterns and Characteristics*

Introduction

Psychoactive substances are drugs or other substances known to alter the brain, which can cause changes in mood, awareness, and behavior, and may contribute to increased risk of adverse outcomes, such as overdose or death. Limited studies have found greater use of psychoactive substances among those with spinal cord injury (SCI), but there is a need for a better understanding on the extent of this issue. The purpose of this study was to identify patterns of nonprescription psychoactive substances use (e.g., cannabis, cocaine, amphetamine-type stimulants, inhalants, sedatives or sleeping pills, hallucinogens, and opioids) among individuals with SCI, and to assess the role of demographic and injury characteristics in psychoactive substances use.

Key Findings

- Of the 4,577 participants, 24.1% of participants claimed they have used at least one nonprescription psychoactive substances. Among these participants, 12.1% reported only using cannabis, while 7.7% reported only using other PAS, and 4.3% reported using both cannabis and other psychoactive substances.
- Cannabis was the most frequently reported psychoactive substances (16.4%) followed by sedatives or sleeping pills (8.0%).
- It was shown that women, participants with higher levels of education and income, and those with C1-C4 injuries who were unable to walk were less likely to report the use of PAS.
- Race and ethnicity did not have a significant relation to psychoactive substances use.

What does this mean?

The results show the prevalence of psychoactive substances use in participants with SCI, with nearly 25% of participants reporting nonprescription psychoactive substances use within the past 3 months, which is higher than in the general population. We also found differences in how personal characteristics play a factor in an individual's risk to substance use. These findings may be used to identify individuals at a higher risk for psychoactive substances use, and tailor interventions. Further research will allow for a better understanding of the patterns seen between SCI individuals and psychoactive substances use and this will prevent the poor outcomes among those vulnerable.

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Risk of opioid use disorder and related consequences: A longitudinal study of spinal cord injury

Study Updates

Study 1 Update:
Risk of opioid use disorder and related consequences:
A longitudinal study of spinal cord injury

Our goal is to generate new knowledge and develop new tools to reduce opioid misuse, opioid use disorder (OUD), and opioid related consequences among those with traumatic spinal cord injury (SCI).

The objectives are to identify the: (1) incidence of opioid use, misuse, and OUD, analyzing and adjusting for potential underreporting, (2) person and environmental predictors of opioid misuse and the development of OUD, and (3) relationship of opioid use, misuse, and OUD with health, participation, and employment.

In August of 2021, we started the data collection for this study. As of June 1, 2022, we collected 1094 Self report assessments and will continue collecting data. We are cleaning the initial data in preparation for analysis.

Opioid Addiction Hotline Hot line

Opioid addiction is becoming preoccupied with two things: when you can take your next dose and whether your supply is enough.

Call 800-662-HELP (4357), the national helpline run by the U.S. government's Substance Abuse and Mental Health Services Administration.

“Dr. Krause was awarded the South Carolina Governor's Award for Excellence in Scientific Research”

Dr. Krause's Award!

James S. Krause, PhD, principal investigator for [more than 20 NIDILRR-funded projects](#), received the [Governor's Award for Excellence in Scientific Research](#) from the South Carolina Academy of Sciences. The award is presented to a researcher in South Carolina whose contributions to scientific discovery merit special recognition and have impacted their respective discipline on a national and international basis. Dr. Krause received this award in recognition of his outstanding accomplishments and excellence in scientific research, including more than 30 years of NIDILRR-funded research focusing on the long-term outcomes of people with spinal cord injuries.

Recent Publications

The following manuscripts were recently accepted to be published in upcoming issues of *Topics in Spinal Cord Injury Rehabilitation* and *Archives of Physical Medicine and Rehabilitation*.

- DiPiro, N. D., & Krause, J. S. (2022). Psychoactive Substance Use Among Individuals With Chronic Spinal Cord Injury: Patterns and Characteristics. *Archives of physical medicine and rehabilitation*, 103(3), 570–573. <https://doi.org/10.1016/j.apmr.2021.08.005>
- Nicole D. DiPiro, David Murday & James S. Krause (2022) Assessment of high-risk opioid use metrics among individuals with spinal cord injury: A brief report, *The Journal of Spinal Cord Medicine*, DOI: [10.1080/10790268.2022.2084931](https://doi.org/10.1080/10790268.2022.2084931)