Research Highlight: Depression, Substance Abuse, Pain

Depression is the most common mental health condition reported after SCI. Depression also increases the risk for early death. Research has demonstrated certain risk factors have been associated with depression.

In a previous study, we looked at risk factors for participants reporting symptoms of depression. We found women and non-white participants were more likely to report more severe depressive symptoms. Those who increased medication use for pain and sleep were also more likely to report worse symptoms of depression.

Next, we looked at the relationship between symptoms of depression, amount of pain, and how pain interfered with completion of activities. Pain interference can influence things such as sleeping and working. When symptoms of pain and pain interference increase, more symptoms of depression are reported. Future research will involve examining symptoms of depression over time in persons with SCI.

Research Highlight: Employment Outcomes

Work rates after SCI have been shown to fall well below pre-injury rates and those of the general population. Our previous research has shown that 30% have worked since their injury.

We recently completed a study to identify barriers (things that make it difficult) and facilitators (things that make it easy) for working after SCI. We asked participants about their work history, current work status, barriers related to work, and facilitators related to work. Fifty percent of participants reported that they could not perform their pre-injury work.

Returning to work after SCI is an important goal of rehabilitation.

We found several factors related to time to first job after SCI. More education, being white, and returning to the pre-injury job resulted in less time to start working after SCI.
Part of our team RRTC goal is to educate hospital and service providers. As part of this goal, MUSC collaborated with Dr. Deborah Backus, Ph.D., P.T. at the Shepherd Center in Atlanta, Georgia to host three conferences around the state of South Carolina. Each event was titled “Translating Evidence to Prevent Secondary Complications after Spinal Cord Injury (SCI)” with the overall purpose of the workshop to train area clinicians and researchers on the secondary conditions related to SCI and provide education to reduce secondary complications and increase longevity after SCI.

The first conference took place in October 2010 at the Medical University of South Carolina in Charleston, SC with 25 attendees. The second conference took place in Spartanburg, SC on February 26 at Spartanburg Regional Hospital and the third conference in Columbia, SC at Palmetto Health Richland Hospital on March 26. There were 80 registrants in Spartanburg and 28 attendees in Columbia. The information was very well received by all participatory audiences. Participants included physicians, nurses, occupational therapists and physical therapists and all attendees were eligible for three hours of continuing medical education (CME) credit. The anonymous feedback received on the workshop objectives, relevance, and presentation techniques from the participants was very complimentary and positive with encouragement to do additional workshops in the future.

Each half day workshop consisted of three presentations by Dr. David Apple, M.D., Dr. Deborah Backus, Ph.D., P.T., and Joycelyn Craig, RN, BSN, CRRN all from the Shepherd Center. After the conclusion of these conferences, the presenters from the Shepherd Center have identified several additional training products to provide to trauma centers and will be sending those materials out over the next few months in order to continue education and dissemination of information. In the coming years, Dr. Backus and her team will re-visit these hospitals to provide follow-up information, and additional training.

**Trauma Center Conferences**

**You Tube Update**

All of our You Tube videos can be viewed at: www.youtube.com/user/SCIResearchTeam
You Tube videos for our grant research follow three different tracks: professional directed audience, CHORCUP, and RRTC. The following videos are currently available for viewing:

- CHORCUP Volume 1: Introduction to our You Tube
- CHORCUP Volume 2: Summer Undergraduate Research
- CHORCUP Volume 3: Consumer Advisory Panel on Stressful Events
- SCI Research Byte Volume 1: Earnings and SCI
- SCI Research Byte Volume 2: Depression in Terms of Race
- SCI Research Byte Volume 3: Injury, Severity, and Education
- SCI Research Byte Volume 4: Ambulation and Depression
- SCI Research Byte Volume 5: Somatic and Non-Somatic Depressive Symptomatology
- SCI Research Byte, Vol 7: Health and Life Expectancy
- SCI Research Byte, Vol 8: Risk Factors for Early Mortality

**Websites**

All three of our team websites have recently gotten an updated look.

- SCIorg: http://academicdepartments.musc.edu/chp/sciorg/
  OR www.sciresearchteam.musc.edu

- CHORCUP: http://academicdepartments.musc.edu/chp/CHORCUP

- RRTC: http://academicdepartments.musc.edu/chp/rrtc

There is also some new functionality on all sites, such as links to our abstracts on PubMed, easy links to our YouTube videos, and new bios for our updated team.
Dealing with Life Head On: A Conversation with James Outlaw

James Outlaw, who is known as “Jim Bo” to his friends, is the type of person who is the first to admit that his single car accident was his own fault on the evening of March 7, 1990. When you see a picture he has of his car after the accident, it is amazing anyone survived. James woke up in the hospital after being in a coma for over three months to find that he had sustained a traumatic brain injury as well as a spinal cord injury (T-6 complete). He participated in months of inpatient therapy to relearn all the activities of daily living most people take for granted such as talking, feeding himself, and writing.

When I asked James of his philosophy on dealing with life after his accident, he expressed that “my life is what it is. You have to deal with the daily challenges head on.” James initially lived with his mother but quickly realized that he would need to rent his own apartment in order to truly get on with his life. His family coordinated personal aide services through a state agency, Community Long Term Care, to provide support three days a week. In 2000, James purchased a new mobile home.

He had been employed prior to his accident as an electrician and found it very difficult to adjust to not working. In 1998, James worked with a Vocational Rehabilitation job coach to secure a job with Walmart.

Although he was hired to be a greeter, James was transferred to the men’s clothing department during the first week. He will celebrate his 13th year working at Walmart on May 31, 2011.

James expressed that “you must keep your mind and body in shape. I started to go to a local gym to work out with weights. Not only does it help me maintain my upper body strength for transfers but it provides me with a social outlet to meet and interact with other people.” James has been involved in both of the Charleston brain and spinal cord injury support groups. He is an avid fan of going to live rock concerts. He has participated in the Southeast Regional Para-Olympic Games (weight lifting) and has been an active member of our consumer advisory panel which provides us with a consumer perspective and direction in our research.

I first met Jim Bo in 1994 when I worked as a service coordinator for the Disabilities Board of Charleston County. Over the years Jim Bo has always impressed me with his ability to keep positive and motivate himself to keep going no matter what. Keep smiling Jim Bo. ~Richard Aust

“You must keep your mind and body in shape. I started to go to a local gym to work out with weights. Not only does it help me maintain my upper body strength for transfers but it provides me with a social outlet to meet and interact with other people.” ~James Outlaw

Center for Rehabilitation Research and Neurological Conditions

On Wednesday, May 4, MUSC celebrated the Grand Opening of the Center for Rehabilitation Research in Neurological Conditions. This center encompasses state of the art research by various MUSC faculty members on spinal cord injury, stroke, cerebral palsy, and other neurological conditions. The Grand Opening focused on the neuromuscular assessment lab, voice and swallowing lab, locomotor energetics and assessment lab, locomotor rehabilitation lab, upper extremity motor function lab, and Dr. Krause’s neurological conditions research.

Over a hundred attendees came to this event, including the president and provost of MUSC, dean’s of MUSC colleges, director of the VA medical center, and clinicians and researchers from around MUSC and the local medical community.

Dr. Jim Krause was able to showcase recent research on spinal cord injury and traumatic brain injury, as well as share future research endeavors and goals, while the other neuroscience faculty in the center conducted lab tours and demonstrations of their current research.
Please contact us to update your address or phone #.
Email: aust@musc.edu
Toll-free #: 1-866-313-9963

The latest SCI Outcomes Research Group newsletter
is now available online: www.musc.edu/chp/sciorg

Thank you for your support and insight by participating in our studies.

Jim Krause, PhD
Team leader, (C4, 37 years post-injury)

 Websites To Check Out!

Disability Information and Resources: www.makoa.org
SCI Information Network: www.spinalcord.uab.edu
National Spinal Cord Injury Association: www.spinalcord.org
SCI Information Pages: www.sci-info-pages.com
Shepherd Center: www.shepherd.org
Lumosity Brain Games www.lumosity.com
Disabled and Productive www.disabledandproductive.com

Disclaimer: We list these websites for your information only and do not endorse the information posted on these websites.