Pain and Spinal Cord Injury in South Carolina

Pain is a common issue for people with spinal cord injury (SCI), and is typically more severe in those with SCI than in the general population. As with the general population, people with SCI may have nociceptive pain, which is joint or muscle pain (e.g., aches, soreness). This includes things like shoulder pain and pain from pushing a wheelchair or using a walker. People with SCI may also have neuropathic pain, or nerve pain. This is more of a burning, tingling, or shooting sensation, even in places where the individual does not have actual feeling. Pain can affect quality of life and function. Having more pain also means people may be more likely to take opioids to treat pain.

This fact sheet is based on a self-report study of 1,018 people with SCI in South Carolina. Therefore, the information applies most directly to people with SCI in South Carolina, although the information would generally apply to most people with SCI. Participants answered several questions about pain and how it affected their lives.

Number of painful days in a month

This graph shows the portion or percentage of participants who had a certain number of painful days in the last month. We grouped number of painful days into seven categories.

Over 80% of participants reported at least 1 painful day. Three out of 10 participants reported pain on most days of the month. The average days of pain was 14.7 days.
Number of painful conditions

This graph shows the portion or percentage of participants who had a certain number of painful conditions. We regrouped the number of painful conditions into four categories.

Nearly half of participants reported having 1-2 painful conditions. Just over 1 in every 4 people reported 3-4 conditions. Only 1 in every 10 people stated they had no painful conditions, so pain is important for most people with SCI.

Rating of pain on average
(scale of 0-10)

This graph shows the portion or percentage of participants who reported different levels of pain on a scale from 0 – 10. We regrouped the pain severity variable into four categories: no pain, mild, moderate, and severe pain.

Most people reported moderate pain (4-6 on a scale of 0-10) or severe pain (7 or higher). Less than 1 out of every 10 participants reported no pain. Therefore, there are a large portion of people with SCI for whom pain is a major problem.

Portion of people using prescription meds for pain

This graph shows the portion of people who use prescription meds to treat pain and is broken down by how often they use them.

Over half of participants (54.2%) indicated they use prescription meds daily for management of their pain. One out of about every 5 people take no prescription medication at all for pain and another 1 out of 5 take it less than weekly.
Pain on average in those who use meds daily for pain

This graph shows the portion or percentage of participants reporting no pain, mild, moderate, or severe pain, among those who use daily pain meds.

In those who take prescription medication daily for pain, only 2% reported no pain. Most people reported moderate pain (37.7%) or pain as bad as you can imagine (50.6%). That means nearly 4 out of every five people being treated with daily prescription medication continue to have significant pain. This suggests that pain medications do not appear to be working very well for most people. They still report a lot of pain.

Depression status as related to number of painful conditions

This graph shows the portion or percentage of participants who had high depression scores broken down by the number of painful conditions.

The number of painful conditions was strongly related to depression (based on a cutoff suggesting probable depressive disorder). None of our participants who had no painful conditions reported being depressed. For those with 1 or 2 painful conditions, just over 1 out of every 10 people were depressed. About 3 out of every 10 people who had 3-4 painful conditions were depressed, while almost half of those who had 5 or more painful conditions reported being depressed.

Depression status as related to pain severity

This graph shows the portion or percentage of participants who had a high depression scores broken down by the severity of their pain.

Pain severity was highly related to depression. Literally, none of the participants with no pain were depressed. The portion of people depressed increased as pain severity increased. About 8 out of every 10 people who reported severe pain also had scores in the depressed range.
Number of painful conditions by ambulatory status

This graph shows the average number of painful conditions among participants who either could not walk at all, they could walk without anyone’s assistance, they could walk but they needed assistance from at least one other person.

People who could not walk at all reported the fewest painful conditions. People who could walk and did not require assistance, on average, reported slightly more painful conditions than those who could not walk at all. Those who walked, but required assistance, had the most painful conditions.

Summary and Recommendations

On average, in the past month, participants reported that almost half the days (14.7 days), pain made it hard for them to do their usual activities, such as self-care, work, or recreation. Of those participants who had at least one painful condition, over half reported daily prescription medication use to treat pain. Among those participants who used pain medication every day to treat pain, the majority still had a lot of pain. So the pain medication clearly was not eliminating all or most of the pain.

There was a very strong relationship between the number of painful conditions, how severe the pain was, and the percentage of people who appear to be depressed. People without pain were rarely or never depressed in this study. Among people who reported severe pain, four out of every five appeared to be depressed. This stresses how important it is to find ways of treating pain for people with SCI. It is clear that prescription meds alone do not take care of the pain for a lot of people.

This fact sheet is not meant to replace the advice of your physician or other healthcare provider. You should always consult your physician or healthcare provider before making changes to behavior, treatment, and particularly the use of medicine. This is only one study. Other studies may have different findings. This fact sheet is a product of grants 2017 SI-02 and 09-001 from the South Carolina Spinal Cord Injury Research Fund.